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TECHNICAL MANUAL

DESCRIPTION,
OPERATION, INSTALLATION, AND
MAINTENANCE INSTRUCTIONS

HOYT LAUNDRY DRYER MODEL GWSII
440VAC, 3 PHASE, 60 HERTZ

HOYT CORPORATION
Westport, MA 02790

(508) 636-8811



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SAFETY SUMMARY

The following are general safety precautions that are not related to any specific procedures and therefore do not appear elsewhere in this publication. These are recommended precautions that personnel must understand and apply during many phases of operation and maintenance.

KEEP AWAY FROM LIVE CIRCUITS

Operating personnel must at all times observe all safety regulations. Do not replace components or make adjustments inside the equipment with the high voltage supply turned on. Under certain conditions, dangerous potentials may exist when the power control is in the off position, due to charges retained by the capacitors. To avoid casualties, always remove power and discharge and ground a circuit before touching it.

DO NOT SERVICE OR ADJUST ALONE

Under no circumstances should any person reach into, or enter the enclosure for the purpose of servicing or adjusting the equipment except in the presence of someone who is capable of rendering aid.

RESUSCITATION

Personnel working with or near high voltages should be familiar with modern methods of resuscitation. Such information may be obtained from the Bureau of Medicine and Surgery.

The following warning appears in the text in the volume, and is repeated for emphasis.

=====

WARNING

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Never start machine with any safety device disconnected or bypassed (Page 2-4).

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WARNING

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Before using clothes dryer, make sure the dryer lint filter is clean. (Refer to 3.1 Maintenance, Lint Filter and Compartment) (Page 2-5).

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WARNING

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Never attempt to do any maintenance with the machine operating. High voltages capable of causing death are used in this machine. (Page 3-1).

=====

WARNING

=====

High voltage capable of causing death are used in this equipment. Use extreme caution when servicing either the power supplies or their load components. Disconnect electrical power before servicing. (Page 4-1).

CAUTION

Do not connect any current to this tumbler other than specified without first consulting the factory (Page 1-2).

CAUTION

It is extremely important that the exhaust be as unrestricted as possible. Each machine should have its own outlet duct. (Page 1-5).

CAUTION

When drying certain types of garments, in dryers, for example, plastics, padded garments and delicate fabrics which are likely to suffer heat deterioration, it is recommended that these garments be air dried. (Page 2-1).

CAUTION

The door switch is intended to be a safety feature and should not be used commonly as a switch. The life of the door switch contacts will be considerably shortened if used as a switch to stop the machine. Always depress off/reset switch. (Page 2-5).

CAUTION

Always allow dryer to complete the cool down cycle before depressing off/reset switch. (Page 3-2).

CAUTION

Do not overfill!! Only 3/4 of a pint of oil is all that is required to bring it to the proper level. After adding oil, wait ten minutes before replacing the level inspection plug to allow time for the oil to penetrate the front bearing and level off. (Page 3-2).

CAUTION

When removing the front panel, first disconnect the wires at the terminal blocks for the timer, push to start, indicator lights, door switch and off/reset switch. These wires are numbered for assembly purposes. Caution should be used in reconnecting these wires to the terminal block with the corresponding number (Figure 9-3). (Page 4-3).

APPROVAL AND PROCUREMENT RECORD PAGE

APPROVAL DATE FOR: NAVSHIPS

TITLE OF MANUAL: Description, Operation, Installation and
Maintenance Instructions for Hoyt Laundry
Dryer Model GWS II

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S EQUIPMENTAPPLICABILITY MANUAL
YARD

N00104-92-C-C075

REMARKS:

DATE:

CERTIFICATION:

It is hereby certified that NAVSEA _____ to be
provided under Contract Number N00104-92-C-C075 have been approved
by the approval data shown above.

Steven D. Rooney
HOYT CORPORATION
251 Forge Road
Westport, Massachusetts 02790
Code #01420

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I INSTALLATION INSTRUCTIONS

1.1 INTRODUCTION

The Hoyt Windsor GWS II is a fifty pound capacity, electrically-heated, clothes dryer. It is fully automatic, timer-operated with a direction reversing tumbler basket. This unit was especially designed for use aboard surface ships because of its provisions for disassembly into smaller components.

1.2 SPECIFICATIONS (Refer to Fig. 1-2)

Physical Properties

Width	40"
Depth	46 1/2"
Height	72
Overall To Center Line of Door	39 1/2"
Weight	

Crated	895 lbs.
Uncrated	830 lbs.

Cylinder Diameter	37"
Cylinder Depth	30"
Exhaust Duct Connection	10"

Electrical Properties

Line Voltage	440V/60HZ/3Phase
Rated Amperage	55-Amps
Amps	60
Control Voltage	110V/60HZ/1Phase
Fan Motor	1 1/2 HP
Basket Motor	1/3 HP
Fuses (2)	600 V, 6/10 AMP
Heating Elements (18 @ 1950 Watts)	35.1 KW

Capacity

Maximum Load of Dry Garments	50 lbs.
------------------------------	---------

Air Volume

Exhaust Air Flow	650 CFM
------------------	---------

1.3 LOCATION

There must be an adequate free air supply to the installation not possessing explosive or corrosive properties.

Set the tumbler level, and out from the wall far enough to allow room in the rear for accessibility. In addition, allow room for venting and servicing. The following minimum clearances must be observed:

Above.....	24 in.
Rear.....	12 in.
Front.....	30 in.
Sides.....	2 in.

Refer to Figure 1-1 Mounting Hole Layout for Mounting Specifications.

1.4 ELECTRICAL CONNECTION

All tumblers are wired completely at the factory. The only connection necessary is at the heating unit service box on the machine (refer to Fig. 1-2). A tag is fastened to this box showing the electrical specifications for which the tumbler is wired. Do not connect any current to this tumbler other than that specified on the tag with out first consulting the factory. It is recommended that in the line supplying current to each tumbler, a safety switch be mounted on an adjacent wall. All wiring should be of a permanent nature and the installation performed by a qualified electrician. After wiring has been completed, the tumbler should be checked to see that all components are operating properly, and that the rotation of the fan and motor are correct. The proper rotation is indicated by an arrow on the motor.

CAUTION

Do not connect any current to this tumbler other than specified without first consulting the factory.

NOTE

Grounding lugs are provided in the Heater box assembly as shown in Figure 7.

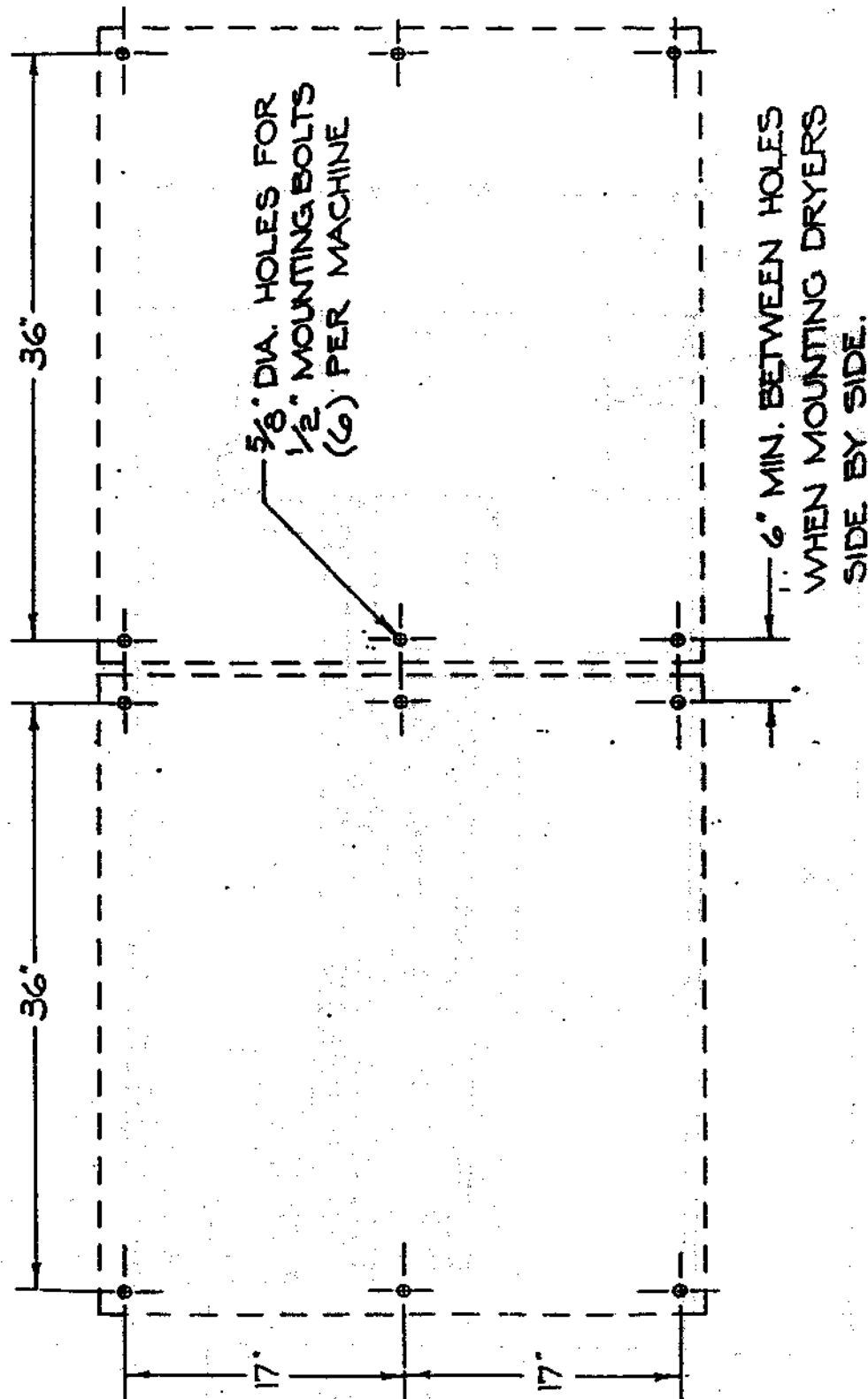


FIG. 1-1
MOUNTING HOLE LAYOUT

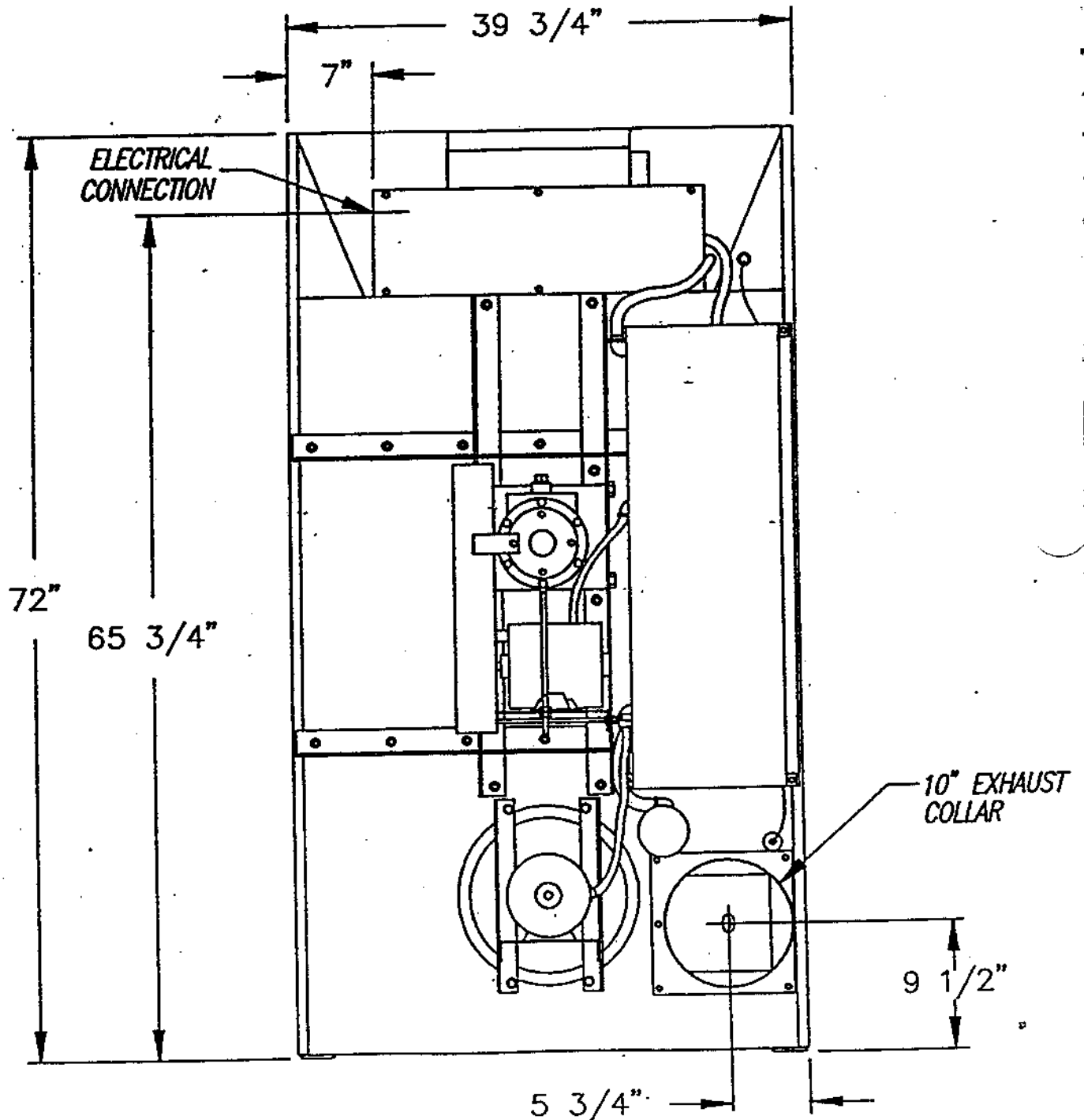


FIG. 1-2
INSTALLATION CONNECTIONS

1.5 EXHAUST DUCTING - VENTING

Normally we do not recommend piping two or more machines into the same duct. In laundries where a main dust collector is used, the piping from the machine into it should be at an angle in the direction of the air flow. All duct work must be not less than 10" in diameter from each machine.

The machine should be located where the least amount of exhaust piping and elbows will be required. Sweep elbows must be used. If the piping extends vertically to the outside atmosphere, a double elbow should be used so that the pipe opening will be downward. This will prevent rain from entering the air duct and flooding the fan compartment, or problems due to prevailing winds. If the duct extends horizontally to the outside, one elbow will accomplish the same result. The external opening of the exhaust duct should not be restricted in any way which would cause impairment of air flow, for example capping too close.

NOTE

Be sure there is no back-draft which will interfere with the normal discharge of air from the tumbler.

CAUTION

It is extremely important that the exhaust be as unrestricted as possible. Each machine should have its own outlet duct.

1.6 EXHAUST DUCT INSTALLATION

When a number of dryers are in a single battery - (Refer to Fig. 1-3) for the diameter in inches of the exhaust duct. Refer to Table of Duct Diameter using total number of dryers connected thereto.

FOR BEST PERFORMANCE - Provide an individual exhaust duct for each dryer. When using a single exhaust duct for two or more dryers, it must be constructed to prevent a reverse discharge of air into anyone of the other dryers.

NOTE

Do not install a hot water heater in room containing dryers. It is better to have the water heater in a separate room with a separate air inlet.

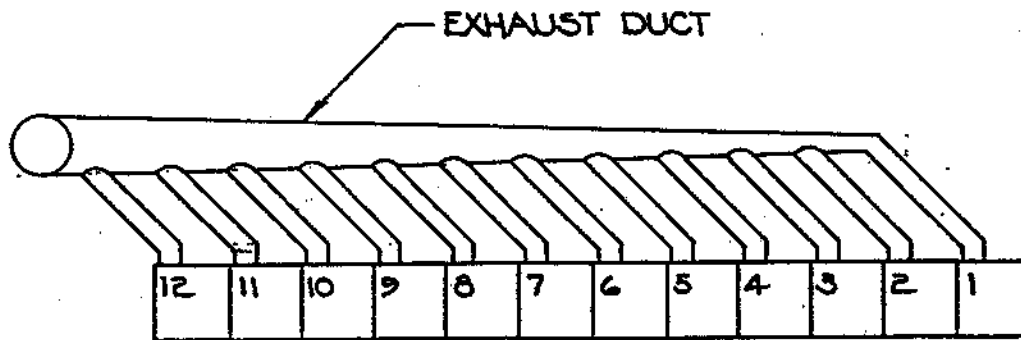


TABLE OF DUCT DIA. IN INCHES

NO. OF DRYERS	1	2	3	4	5	6	7	8	9	10
DUCT SIZE	10	13	16	18	20	22	23	24	26	27

DRYER OUTLET AREA = 75 SQ. IN.

FIG. 1-3
EXHAUST DUCT INSTALLATION SIZING
TABLE

II. OPERATION DRYING

2.1 DRYING

The most efficient drying operation is the result of the following conditions:

1. Unobstructed air duct vent system.
2. Clean lint trap.
3. Proper extraction (4 to 5 minutes).

2.2 DRYING TIME

Since many variables influence temperature settings and drying times, it is not practical to give specific information, as this can be determined by observing a few test loads and using this data to govern general operation.

When drying mixed bundles of synthetics and cottons, the synthetics will dry more rapidly. It is good practice to stop the machine and remove the synthetics when dry.

Dry weight of the load alone is not enough to determine drying time. The type of fabric and size of pieces to be dried must be considered. Small bundles of light weight fabrics will naturally dry faster than large bundles, or small bundles of large pieces.

CAUTION

When drying certain types of garments in dryers, for example, plastics, padded garments and delicate fabrics which are likely to suffer heat deterioration, it is recommended that these garments be air dried.

2.3 OPERATOR CONTROLS (Refer to Figure 2-1)

1. Temperature selection switch - operator selects hot (185 deg. \pm 10 deg. F) or warm (155 deg. \pm 10 deg. F) setting.
2. Temperature gauge - informs the operator of the temperature at which the dryer is operating.
3. "Heat On" indicator - informs the operator when the temperature controller is "calling" for heat. This light may go on & off during the drying cycle.
4. "Drying Cycle" and "Cool Down Cycle" indicator - informs the operator what cycle the machine is presently in.
5. Start button - starts machine when depressed if the door is closed and there is time set on the timer.
6. Off/Reset Button - stops machine during any cycle. Buzzer indicates when "Drying Cycle" and "Cool Down Cycle" have ended.

NOTE

In order to terminate buzzer at end of cycle, off/reset button must be depressed.

7. Timer - Operator adjusts dial to desired time.
8. Lint Screen - Located in the lint compartment. The compartment and screen should be cleaned daily.

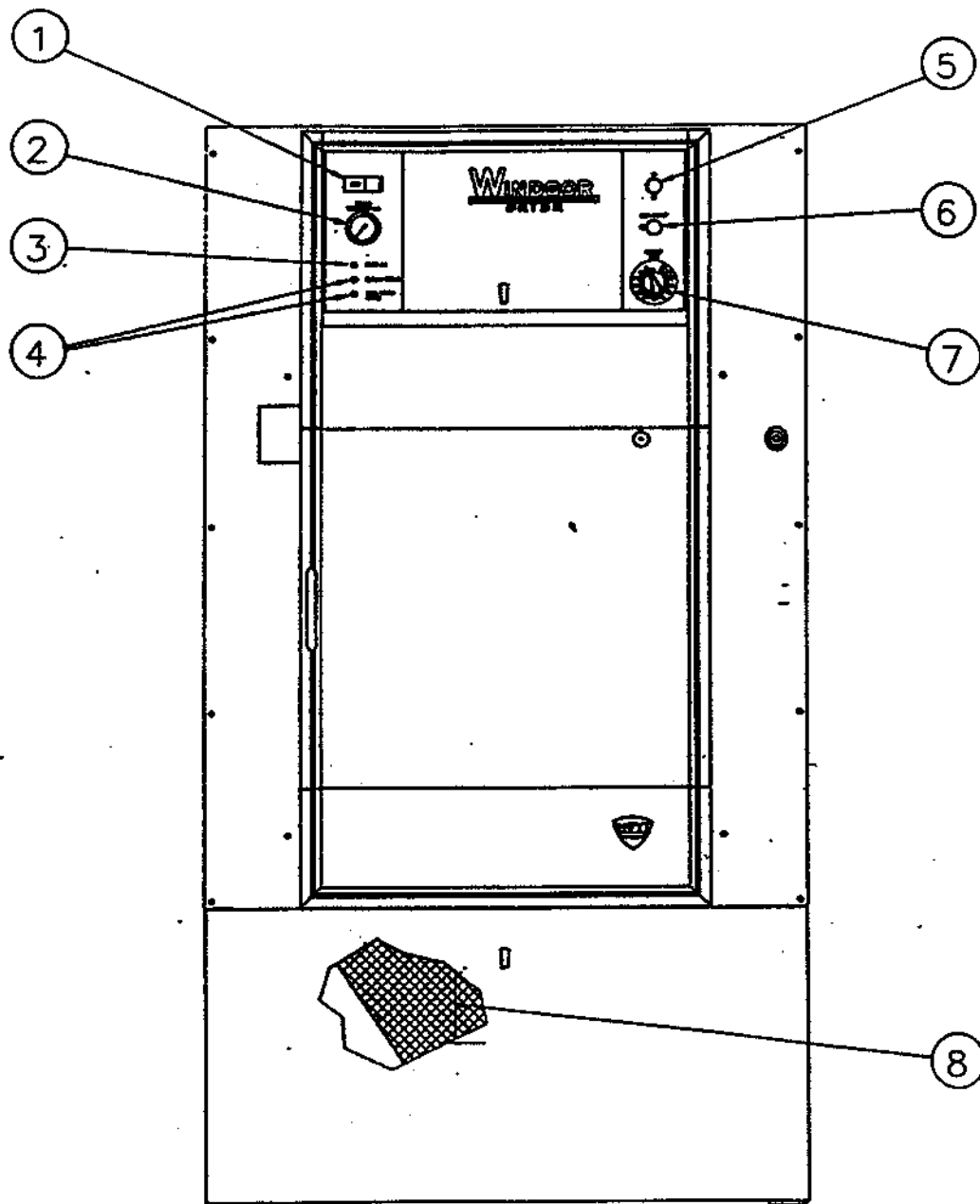


FIG. 2-1
OPERATOR CONTROLS

2.4 FUNCTION OF VARIOUS COMPONENTS

Air Flow Sensor (Item 31 - Fig. 8-2) - A safety device which will shut off electrical power to the heating coils if there is a restriction in air movement through the dryer.

High Limit Switch (Item 43 - Fig. 8-2) - A safety device which will shut off electrical power to the heating coils in the event of the temperature increasing beyond 200 deg. F in the lint chamber.

Thermal Overload Switches (Items 3 and 11 - Fig. 8-9) - Will shut off motor if a condition develops where too much current is being drawn. Resets are located in rear electrical Box.

Heater Contactor (Item 14 - Fig. 8-3) - Is completely automatic and will maintain the temperature set on the temperature controller by controlling when power is allowed through the heating elements.

Temperature Control (Item 3 - Fig. 8-6) - Controls the temperature through the entire drying cycle according to the setting.

Door Switch (Item 15 - Fig. 8-1) - is a safety device designed to shut down the machine completely, should the loading door be opened while the machine is in operation. None of the electrical controls will operate with the loading door open.

Lint Filter (Item 34 - Fig. 8-1) - When build up of lint develops over the filter area the designed self cleaning action will cause this lint to fall into the compartment below. When cleaning the compartment it is good practice to also shake free any lint which may be stuck in the pores of the filter. Daily cleaning of this compartment is recommended.

Cool Down Temperature Switch (Item 32 - Fig. 8-1) - Automatically activated at the completion of the timed drying cycle. It enables the dryer to enter the cool down phase of operation.

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WARNING

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Never start the machine with any safety device disconnected or bypassed.

2.5 OPERATION SEQUENCE

=====

WARNING

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Before using clothes dryer, make sure the dryer lint filter is clean. (Refer to 3.1, Maintenance, Lint Filter and Compartment).

1. Select proper drying temperature by depressing the hot (185 deg. \pm 10 deg. F) or warm (155 deg. \pm 10 deg. F) setting on the temperature control switch.
2. Set drying timer (0-60 mins.) to desired setting.
3. Push start button. Dryer will operate and dry the items in the tumbler until time has expired. The dryer will then automatically go to the cool down cycle. When the temperature inside the dryer cools to 135 deg. \pm 10 deg. F the buzzer will sound to inform the operator the cycle is complete.
4. The dryer will continue to operate in cool down with buzzer sounding until the off/reset button is depressed, (the off/reset button will also stop the dryer at any time during operation). If the off/reset button is depressed during the drying cycle the push to start button must be depressed to turn the machine back on to continue drying. If the off/reset button is depressed during cool down the push to start button must be depressed to continue cool down but will only restart the machine if the temperature is still above 135 deg. \pm 10 deg. F.

CAUTION

The door switch is intended to be a safety feature and should not be used commonly as a switch. The life of the door switch contacts will be considerably shortened if used as a switch to stop the machine. Always depress the off/reset button.

III MAINTENANCE

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WARNING
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Never attempt to do any maintenance with the machine operating. High voltages capable of causing death are used in this machine.

3.1 LINT FILTER AND COMPARTMENT:

The Lint Filter is of a self cleaning type that maintains reasonable air flow throughout the days operation. Excess lint is collected in the compartment below the filter.

Both the Lint Filter and Lint Compartment should be cleaned daily by removing the lower front panel of the machine. In addition, any accumulation of lint on the baffle directly beneath the basket cylinder should be removed.

Should any damage occur to the Lint Filter which would allow passage of lint into the exhaust ducting, the filter should be replaced.

NOTE

When replacing lint filter. Be sure that tag marked front on lint filter is installed in the front on the lint hood.

3.2 EXHAUST DUCTING:

Because of moisture and fine particles of dust passing into the exhaust system, it is possible that a gradual build-up may occur in the ducting. This should be inspected and cleaned at least twice a year.

3.3 VENTILATING AIR:

The make-up air openings into the Dryer Area should never be obstructed or blocked off. Free air entrance to the dryers and replacing the air being evacuated from the area through the dryers is necessary for good operation.

3.4 HEATING ELEMENTS:

Allowing Dryer to complete cooldown cycle will greatly increase the life of the heating elements. Element surface temperature should be lowered before unit is turned off.

CAUTION

Always allow dryer to complete the cooldown cycle before depressing off/reset switch.

3.5 REDUCER HOUSING ASSEMBLY: (Refer to Figure 3-1)

- A. Periodically check the oil level by removing the 1/8" pipe plug from the end cap on the back of the reducer housing. The oil level should be at the bottom of this tapped hole.
- B. If oil is needed, remove the 3/8" pipe plug (with vent tube) at top of housing, and add a good grade of S.A.E. #140 oil (extreme pressure lubricant) at this tapped hole.
- C. Once every six months, drain the reducer housing by removing the drain plug from the bottom, and refill to the proper level in accordance with the preceding instructions, being sure to clean off any accumulation of material from the magnetic drain plug, before refilling.

CAUTION

Do not over-fill!! Only 3/4 of a pint of oil is all that is required to bring it to the proper level. After adding oil, wait ten minutes before replacing the level inspection plug, to allow time for the oil to penetrate the front bearing and level off.

3.6 INSPECTION AND CLEANING

1. Inspect drive V-belt (Item 20 - Fig. 8-2) every six months for cracks, fraying, and evidence of unusual wear; replace belt if damaged. Inspect drive belt for proper tension. Depress belt by hand in a central location between pulleys; belt should depress from 1/4" to 1/2".
2. Clean and inspect clothes dryer's electrical and moving components weekly. Replace damaged parts. Inspect electrical and mechanical connections for tightness; tighten loose connections.

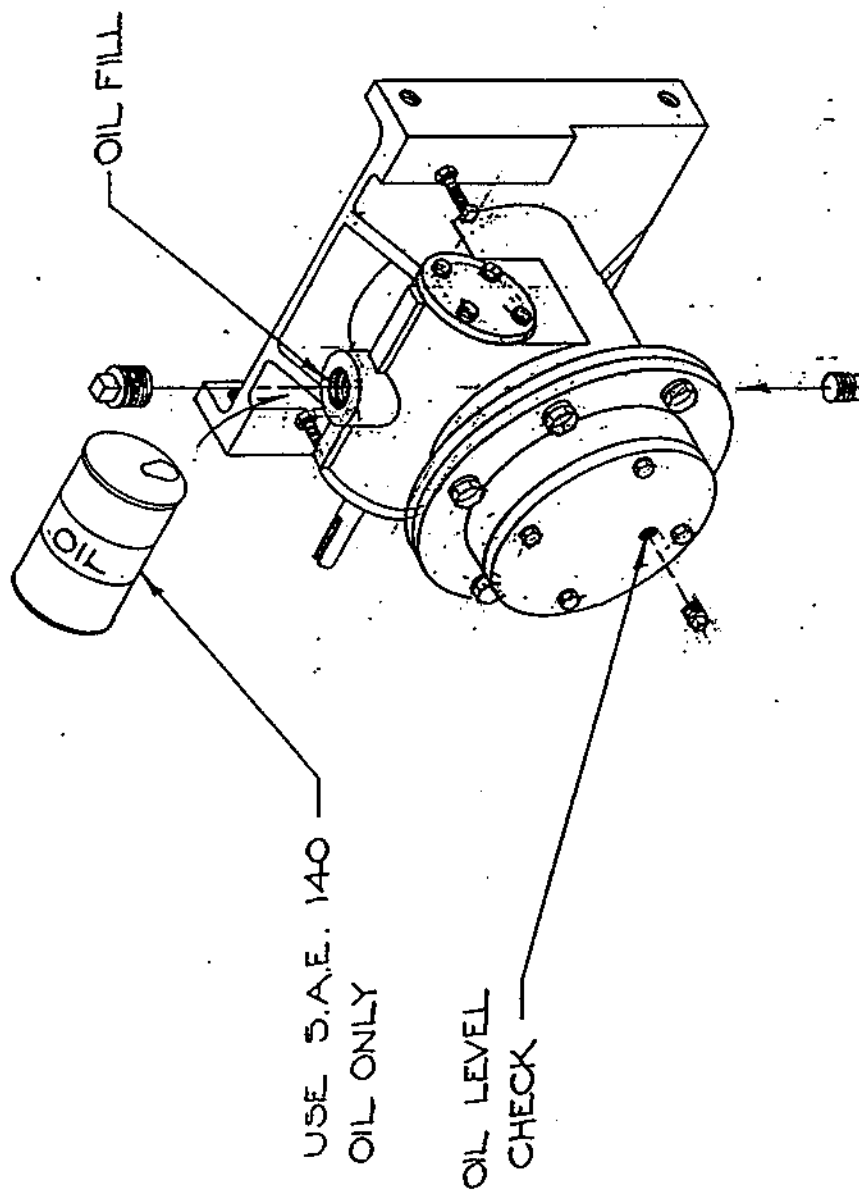


FIG. 3-1
REDUCER HOUSING ASSEMBLY SERVICE

3. Test clothes dryer door safety switch weekly. With the clothes dryer in operation, open the door slowly; the safety switch must interrupt the circuit to all controls and shut the machine down completely before the door is open more than 1".
4. Clean clothes dryer exhaust ducting and heating elements monthly using a vacuum cleaner. Use rags to remove remaining dirt.

IV. SERVICE

WARNING

High voltage capable of causing death are used in this equipment. Use extreme caution when servicing either the power supplies or their load components. Disconnect electrical power before servicing.

4.1 BASKET CYLINDER ALIGNMENT PROCEDURE: (Refer to Figure 4-1)

- A. If the opening in the front of the basket cylinder is not properly aligned with the opening in the casing front proceed as follows:
- Loosen the four 1/2" capscrews that secure the main bearing housing to the sides of the frame at the rear of the machine.
 - Loosen the locknuts on the two square head jackscrews.
 - Tighten these screws to raise the cylinder opening with respect to the opening in the casing front, or loosen them to lower it, etc.

NOTE

Spacing should be equal at sides, but there should be slightly more space at the top than at the bottom. When proper alignment has been achieved, re-tighten the two jackscrew locknuts and the four 1/2" hex head capscrews securely.

4.2 BASKET CYLINDER REMOVAL

- A. Should it become necessary to remove the basket cylinder from the machine for any reason, proceed as follows:

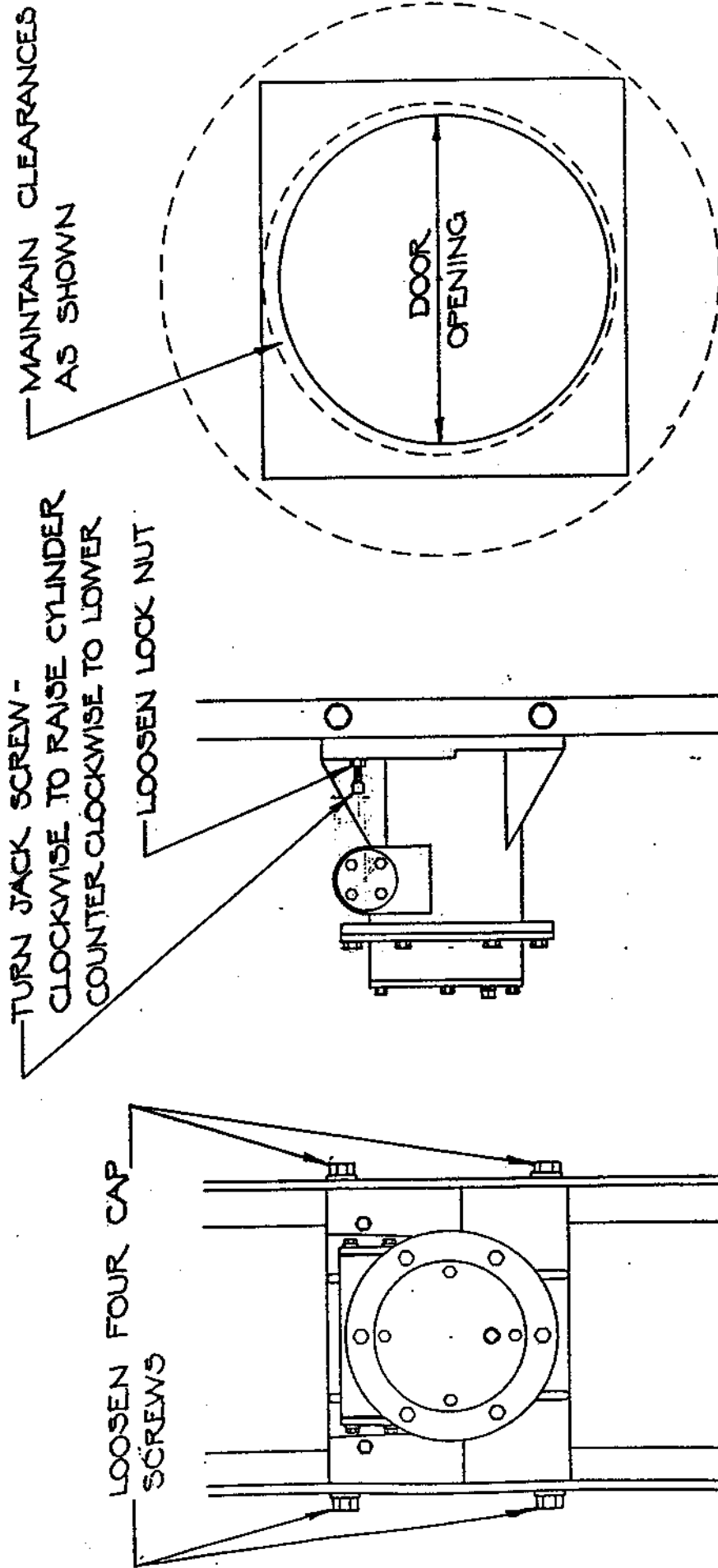


FIG. A

FIG. B

FIG. C

FIG. 4-1 BASKET CYLINDER ALIGNMENT PROCEDURE

CAUTION

When removing the front panel, first disconnect the wires at the terminal blocks for the timer, push to start, indicator lights, door switch and off/reset switch. These wires are numbered for assembly purposes. Caution should be used in reconnecting these wires to the terminal block with the corresponding number (Fig. 9-3).

- a. Disconnect front access panel wiring. (Fig. 8-7)
- b. Remove lint chamber door.
- c. Disconnect temperature gauge bulb (located in lint chamber) and guide through 3 grommet holes (Item 48 - Fig. 8-2) until bulb and braided line are completely free from machine.
- d. Disconnect crossover harness (located beneath access panel hinge) at terminal blocks in the right and left front enclosures. (Item 19 - Fig. 8-6)
- e. Remove 2 6x32 machine screws from door switch cover and remove cover. (Item 16 - Fig. 8-1)
- f. Disconnect 2 leads on door switch and push leads through grommet.
- g. Remove 19 10-32 machine screws from front panel and remove panel.
- h. Drain oil from main bearing housing by removing drain plug (Fig. 3-1) remove four bolts which retain reducer housing end cap, and gently pry off from back of housing.
- i. Remove (2) 3/8" Hex bolts and shaft retainer washer (Fig. 8-10).
- j. Pull basket cylinder from machine.

4.3. SPEED REDUCER BEARING HOUSING: (Figure 8-5)

- A. Removal: Should it become necessary to remove the speed reducer bearing housing from the machine for any reason, first secure basket cylinder in place by wedging wooden shims between its front lip and the casing door opening ring, and then proceed as follows:
 - a. Remove the bolts and nuts securing the belt guard, and remove belt guard (Items 21 and 22 - Fig. 8-2).
 - b. Remove the belt tension adjusting rod, loosening drive belt, and remove belt. (Items 30 & 20 - Fig. 8-2)

- c. Remove the drain plug from the bottom of the reducer housing, and drain oil from housing, being sure to clean off any accumulation of material from the magnetic drain plug, before replacing.
- d. Remove the four bolts securing the end cap on the rear of the reducer housing and remove end cap. (Fig. 8-10)
- e. Remove the two bolts securing the cylinder trunnion shaft, and remove cylinder retainer/washer.
- f. Remove the four bolts securing the reducer housing to the angle iron supports on the rear of the machine.
- g. Slide the reducer housing to the rear, off of the trunnion shaft, leaving square key in place in the key way on the shaft. (Item 13 - Fig. 8-2)
- h. Replace the bearing housing by reversing the above procedure.
- i. Check the basket cylinder alignment and the belt drive for proper pulley alignment and belt tension.

4.4 MOTOR:

Removal: Should it become necessary to remove the motors from the machine for any reason proceed as follows:

- A. **Basket Motor:** (Item 23 - Fig. 8-2)
 - a. Remove bolts securing belt guard.
 - b. Loosen the belt tensioning rod enough to allow V-Belt to be removed from motor pulley.
 - c. Disconnect wiring from motor and remove wiring and conduit elbow from motor, intact.
 - d. Remove the four 5/16 - 18 hex bolts and nuts securing the motor to the base and remove motor.
- B. **Fan Motor:** (Item 37 - Fig. 8-2)
 - a. Disconnect wiring from motor and remove wiring and conduit elbow intact.

- b. Remove the four 3/8 - 16 hex bolts securing the fan assembly to the machine.
- c. Remove fan assembly and motor from machine intact, by withdrawing it slowly to the rear.
- d. Loosen Allen-Head setscrews securing fan impeller to motor shaft and remove impeller.
- e. Remove the four 5/16" - 18 hex bolts securing the motor to the base and remove motor.
- f. To reinstall motor, reverse steps A through F.

4.5 HEATING ELEMENTS: (Fig. 8-3)

Element removal from front of machine.

- A. Remove 1/4 - 20 Hex bolts from front and rear of heating unit and remove covers. (Items 7 and 5 - Fig. 8-2)
- B. Remove 1/4 - 20 Hex bolts on row of elements that contains the element to be replaced. This is done to both the front and rear of heating unit. (Figs. 4-2 and 4-3)
- C. Disconnect all wiring from that row and remove insulator plate and standoffs (rear of machine only).
- D. From the front of the machine remove wiring and (Refer to Figures 9-1 and 9-2, Heating Element Wiring Details in Wiring Details Section), 8-32 nut beneath wiring connection, insulator plates and slide element out.

NOTE

It may be necessary to lift element up from the back of the machine while removing.

NOTE

It may be necessary to lower the bottom row of elements when removing an element from the middle.

FRONT ENCLOSURE
COVER SHOWN REMOVED

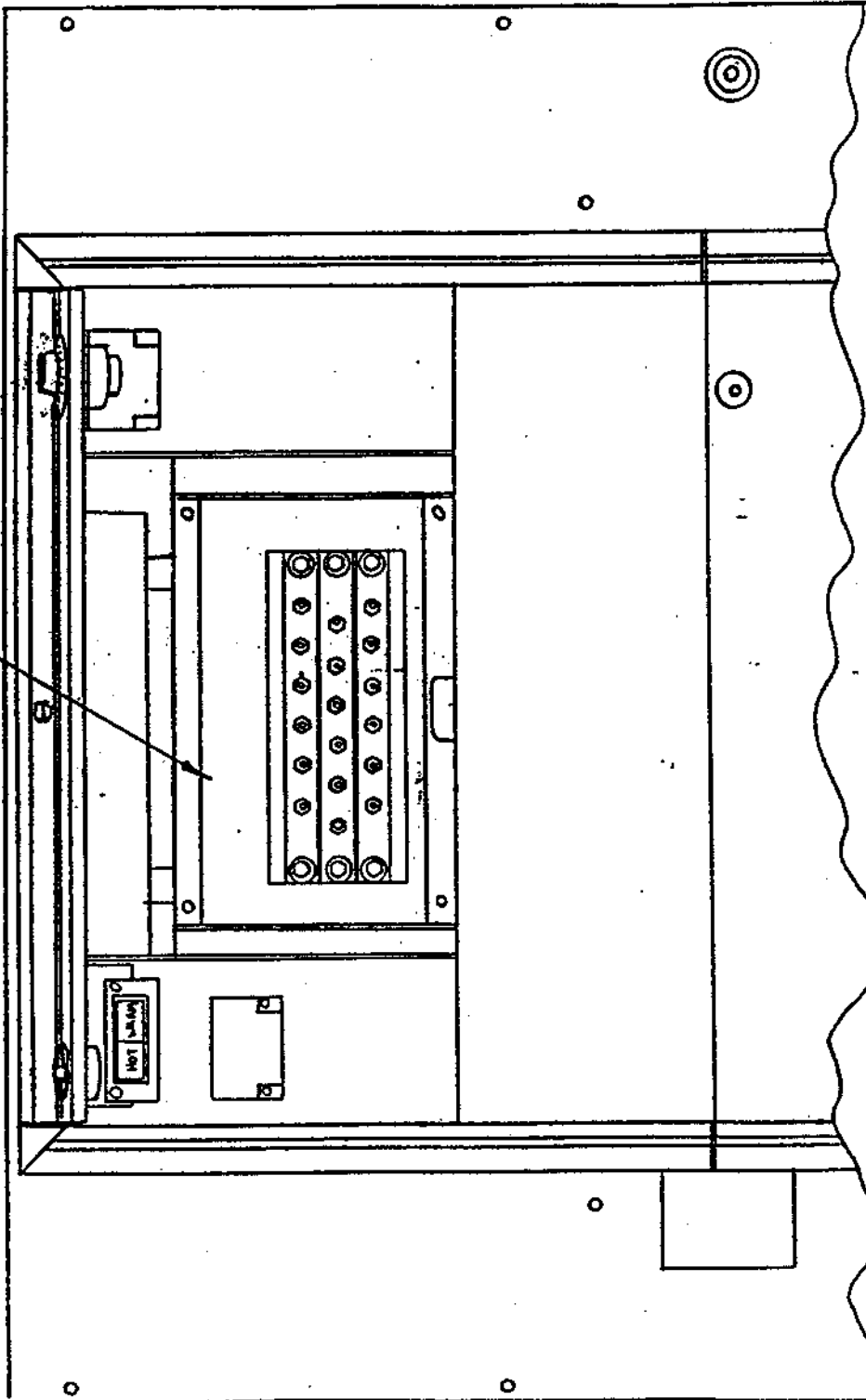


FIG 4-2
FRONT ENCLOSURE

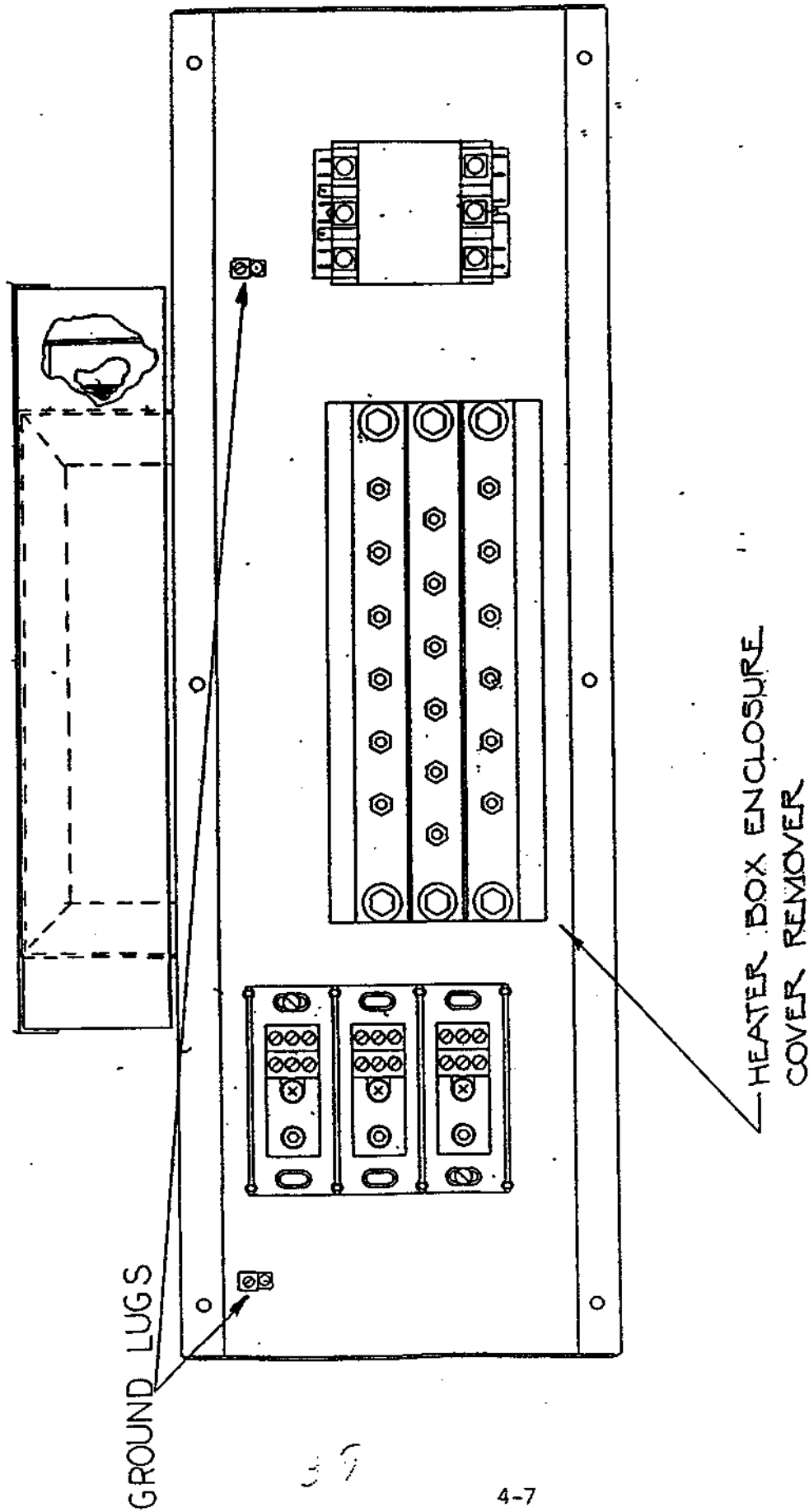


FIG. 4-3
HEATER BOX ELECTRICAL CONTROLS ASSEMBLY

V DISMANTLING PROCEDURE

5.1. HEATER BOX REMOVAL: (Fig. 8-3)

- A. Remove heater cover by removing (6) 1/4 - 20 Hex bolts and removing (2) 1/4 - 20 Hex bolts from high limit harness assembly.
- B. Remove heater box front enclosure cover by removing (4) 1/4 - 20 Hex bolts and remove (2) 1/4 - 20 Hex bolts which mount enclosure to top of dryer.
- C. Remove heater box rear enclosure cover by removing (6) 1/4 - 20 Hex bolts and remove (3) 1/4 - 20 hex bolts located inside of enclosure which are used to mount enclosure to top of dryer.
- D. Remove (8) 1/4 - 20 Hex bolts from side of heater box which mount box to top of dryer.
- E. Disconnect wiring from heater contactor and remove flexible conduit from enclosure.
- F. Remove heater box assembly from dryer.

5.2 FRONT PANEL REMOVAL: (Refer to Fig. 8-1)

- A. Disconnect all wiring from indicator lights drying timer, push to start switch and off/reset switch at terminal blocks in the left and right front enclosures (Figure 8-6).
- B. Remove lint chamber door, disconnect temperature gauge bulb (located in lint chamber) and guide bulb through 3 grommet holes until bulb and braided line are completely free from machine.
- C. Disconnect crossover harness (located beneath access panel hinge) at terminal blocks in the left and right front enclosures.
- D. Remove (2) 6-32 machine screws from door switch cover and remove cover.
- E. Disconnect 2 leads on door switch and push leads through grommet.
- F. Remove (19) 10-32 machine screws from front panel and remove panel.

5.3. REAR ELECTRICAL BOX REMOVAL: (Figure 8-9)

- A. Disconnect all wiring from front left enclosure (Fig. 8-6), basket motor, fan motor and 4" electrical connection box at connections inside large electrical box assembly (Item 41 - Fig. 8-2) and remove all flexible conduit.
- B. Remove (4) 1/4-20 mounting bolts from tabs on exterior of large electrical box and remove box.

5.4 BASKET MOTOR ASSEMBLY REMOVAL:

- A. Remove (2) 8-32 machine screws and (1) 1/4-20 Hex bolt from belt guard and remove guard.
- B. Loosen top 3/8 hex nut on belt tension rod until belt can be removed, then remove bolt on top of rod from bearing housing.
- C. Remove 2 3/8 hex nuts from one side of motor mount hinge rod and slide rod out to free motor from machine.

5.5 FAN MOTOR ASSEMBLY REMOVAL:

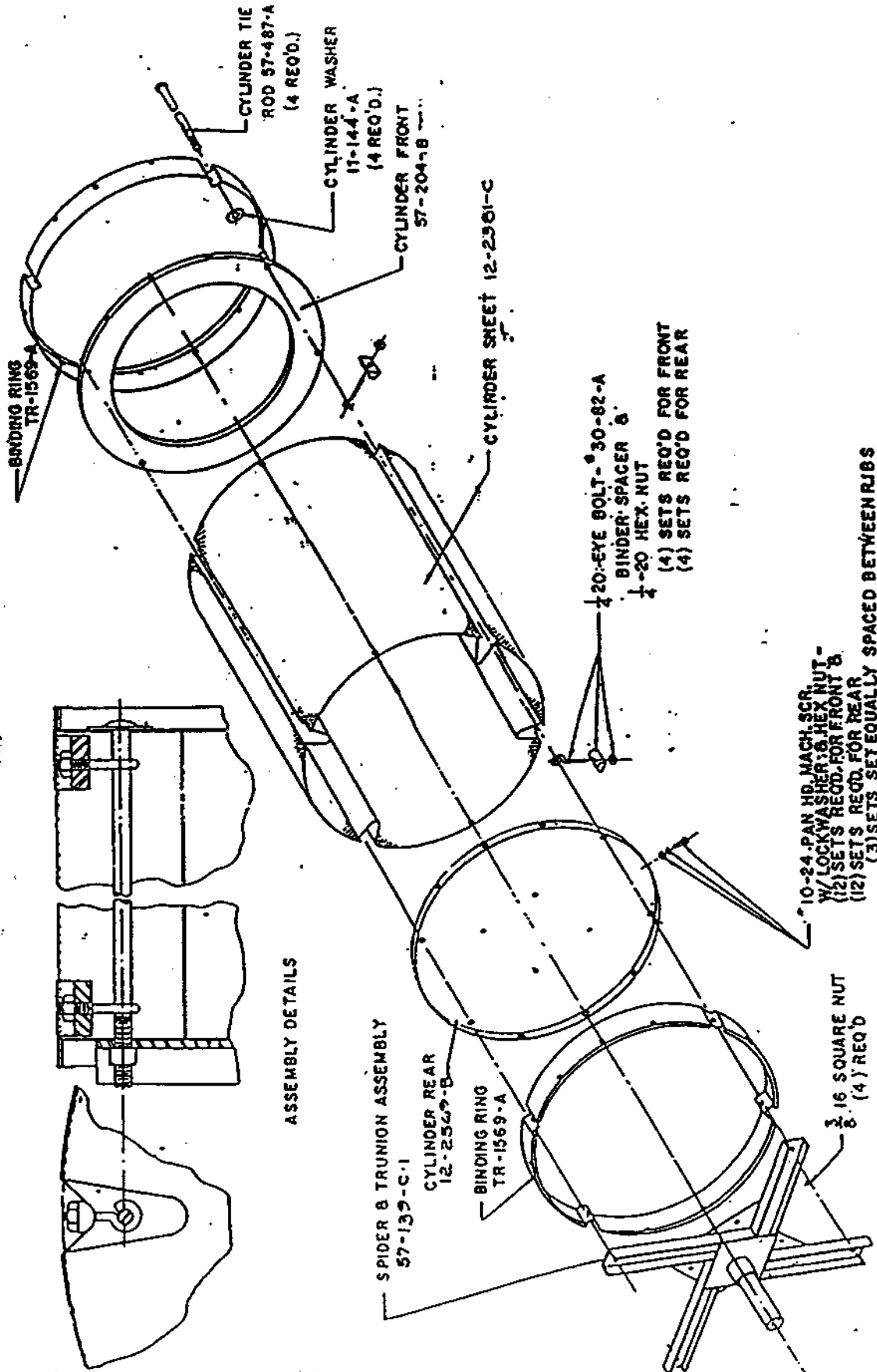
- A. Remove (4) 3/8 bolts from fan assembly and remove assembly.

5.6 BASKET CYLINDER & MAIN BEARING HOUSING REMOVAL (FRONT PANEL REMOVED):

- A. Drain oil from main bearing housing.
- B. Remove (4) 1/4-20 bolts and gently pry off cover from back of housing.
- C. Remove (2) 3/8 hex bolts and shaft retainer/washer (Fig. 8-10).
- D. Pull basket cylinder from machine.
- E. Remove (4) 1/2" hex bolts to remove housing.

5.7 DISASSEMBLY OF BASKET CYLINDER: (Figure 5-1)

- A. Remove nut and binder spacer from 1/4" eyebolts at ends of rib cavities on outside of cylinder.
- B. Remove No. 10-24 machine screws and hex nuts securing binding rings to each end of cylinder.
- C. Pry out binding rings, where indented into rib cavities, to clear rims of cylinder front and rear heads, and remove binding rings.



5-3

FIG. 5-1
 BASKET CYLINDER

- D. Remove nuts from end of 3/8" cylinder tie rods, and triangle plates, and remove spider and trunnion shaft assembly.
- E. Remove cylinder tie rods, eyebolts and front and rear heads of cylinder.
- F. Perforated cylinder sheet assembly may now be easily compressed into an oval shape capable of passing through a 25 x 50 door.

5.8 UPPER SECTION REMOVAL:

- A. Remove temperature control bulb from clip in lint chamber (Item 37 - Fig. 8-1) and carefully pull bulb capillary line from top of machine until completely free. From middle and bottom sections.
- B. Remove (14) 1/4-20 hex bolts and (8) 3/8 hex nuts from back brace and remove brace.
- C. Remove (20) 1/4-20 hex bolts from exterior sides and interior sweep sheets of top section.
- D. Lift off top section.

5.9 MIDDLE SECTION REMOVAL:

- A. Remove (20) 1/4-20 hex bolts from exterior sides and interior sweep sheets of middle section.
- B. Lift off middle section.
- C. Machine is now completely disassembled for installation aboard ship.

VI REASSEMBLY PROCEDURE

6.1. MIDDLE SECTION INSTALLATION:

- A. With lower section on deck place middle section on top of it.
- B. Secure middle section to lower section with (20) 1/4-20 hex bolts on exterior sides (not back) and interior sweep sheets.

6.2 TOP SECTION INSTALLATION:

- A. Lower top section on top of middle section.
- B. Secure top section to middle section with (20) 1/4-20 hex bolts on exterior sides (not back) and interior sweep sheets.
- C. Slide back brace onto studs and secure with (14) 1/4-20 hex bolts and (8) 3/8" hex nuts.
- D. Carefully guide temperature control bulb thru channel on left front corner of top and middle sections. Clip bulb into place in lint chamber.

6.3 BASKET CYLINDER ASSEMBLY: (Fig. 5-1)

NOTE

In reassembling the basket cylinder assembly, it is imperative that the various parts are positioned so that the single red stripes match up at the front end of the cylinder and the double red stripes match up at the rear of the cylinder.

- A. Stand perforated sheet assembly upright on deck, with rear end upward, and install cylinder rear head into end of cylinder, with formed edge facing upward.
- B. Install binding ring onto end of cylinder, with formed edge facing upward, and depress unformed sections of binding ring into rib cavities behind cylinder rear head.
- C. Line up the holes around the periphery of these parts and secure with No. 10-24 machine screws, lock washers and hex nuts.

- D. Invert cylinder and repeat steps A. through C. at front end of cylinder.
- E. Install flat washer on 3/8" cylinder tie rod and insert tie rod into one of four holes in cylinder front head.
- F. Insert end of eyebolt into hole in depressed, unformed section of front binding ring, from the inside, and pass cylinder tie rod through eye of eyebolt.
- G. Repeat step "F" at rear binding ring and pass end of cylinder tie rod through hole in cylinder rear head.
- H. Repeat steps "E" through "G" for remaining three cylinder tie rods.
- I. Install spider and trunnion shaft assembly onto protruding ends of cylinder tie rods and secure with 3/8" square nuts.
- J. Install binder spacers, with curved faces against depressed sections of binding rings, onto protruding ends of eyebolts and secure with 1/4" hex nuts.

NOTE

Check basket cylinder assembly for axial alignment by installing trunnion shaft into main bearing from rear of dryer and observing rotation. If cylinder does not run true, rotate it so that the high side is uppermost, and then spring it downward by bearing down on its forward end until it does run true.

The basket cylinder assembly is now ready for installation in the dryer.

6.4 BASKET CYLINDER AND MAIN BEARING HOUSING INSTALLATION:

- A. Insert basket cylinder into dryer frame with shaft protruding through hole in middle section and out the back.
- B. Slide pulley spacer and felt pad over shaft.
- C. Slide bearing housing over shaft and install (2) 1/2" hex bolts through back brace and into top holes of housing.

- D. Shim tumbler so there is an equal distance between tumbler and sweep sheets.
- E. Install (2) 1/2" hex bolts through back brace and into bottom holes of housing.
- F. Install (2) 3/8 hex bolts and shaft retainer.
- G. Install cover with (4) 1/4-20 hex bolts to housing and fill with 3/4 of a pint of oil.

6.5 FAN MOTOR ASSEMBLY INSTALLATION:

- A. Install fan assembly with (4) 3/8 hex bolts.

6.6 BASKET MOTOR ASSEMBLY INSTALLATION:

- A. Install motor base to back brace with 3/8" rod and 2-3/8 hex nuts.
- B. Install belt tension rod to reducer housing, drive belt and adjust belt tension.
- C. Install belt guard with (2) No. 8-32 machine screws and (1) 1/4-20 hex bolt.

6.7 REAR ELECTRICAL BOX INSTALLATION:

- A. Install (4) 1/4-20 hex bolts, washers, and hex nuts. Then, attach electrical box to back brace.
- B. Reconnect all conduit and wiring.

6.8 FRONT PANEL INSTALLATION:

- A. Connect door switch leads to door switch.
- B. Place panel on front of machine and install (19) No. 10 32 machine screws.
- C. Install door switch cover with (2) 6-32 machine screws.
- D. Connect cross over harness to left and right terminal blocks.
- E. Guide temperature indicator bulb through 3 grommets at rear of machine and install into threaded coupling in lint chamber.

- F. Connect all wiring from top access panel to left and right terminal blocks.

6.9 HEATER BOX INSTALLATION: (Fig. 8-3)

- A. Place heater box on top section of dryer with heater contactor toward rear of machine. Install (13) 1/4-20 hex head bolts for mounting.
- B. Connect conduit and wires to contactor.
- C. Install front and rear enclosure covers with (10) 1/4-20 hex head bolts.
- D. Install heater cover with (6) 1/4-20 hex head bolts.
- E. Install high limit junction box to cover with (2) 1/4-20 hex head bolts.

VII TROUBLE SHOOTING

PROBLEM	CAUSE	REMEDY
7.1 Machine Fails to Operate	<ol style="list-style-type: none"> 1. Power Supply-- no power to machine. 2. Faulty Door Switch. 3. Broken Wire or loose connection between power supply and door switch. 	<p>Check fuses or circuit breaker. (Item 10 - Fig. 8-9)</p> <p>Adjust or replace. (Item 15 - Fig. 8-1)</p> <p>Check Wiring and make necessary correction. (Refer to Fig. 9-5, Physical Wiring)</p>
7.2 Machine tumbles but no heat.	<ol style="list-style-type: none"> 1. Temp. Control failure. 2. High Limit failure. Heater Box High Limit Lint Compartment High Limit 3. Heater Contactor-Solenoid failure. 4. Air Flow Switch 	<p>Replace. (Fig. 8-8)</p> <p>Replace. (Item 2 - Fig. 8-4)</p> <p>Replace. (Item 43 - Fig. 8-2)</p> <p>Replace. (Item 14 - Fig. 8-3)</p> <p>Remove and clean or replace. (Item 31 - Fig. 8-2)</p>
7.3 Heat "On", no tumbling or no air flow.	<ol style="list-style-type: none"> 1. Motor Failure 2. Motor Wiring or Connection 	<p>Have motors checked. Repair or replace.</p> <p>Check Wiring and make necessary corrections. (Figs. 9-4 & 9-5)</p>

VII TROUBLE SHOOTING

PROBLEM	CAUSE	REMEDY
7.4 Slow Drying	<ol style="list-style-type: none"> 1. Temp. Control out of calibration. 2. Temp. Control set too low. 3. Poor Air Flow. 4. Wrong fan rotation. 	<p>Re-Calibrate control. (Refer to Special Instructions Para. 10.1 Thermostat Calibration)</p> <p>Adjust Setting. (Refer to Special Instructions Para. 10.2 Temperature Adjustment).</p> <p>Check venting.</p> <p>Check motor rotation.</p>
7.5 Heat "On" and Air Flows--No Tumbling.	<ol style="list-style-type: none"> 1. Broken Belt. 2. Belt Slippage. 3. Load Too Large 4. Poor Extraction-- Excess Water in loads. 5. Reversing Timer Inoperative 	<p>Replace and adjust.</p> <p>Adjust Tension.</p> <p>No more than 50 lbs. dry weight</p> <p>Check washing machine extract cycle.</p> <p>Replace Timer Assembly (Item 13 - Fig. 8-9)</p>
7.6 Machine too hot	<ol style="list-style-type: none"> 1. Temp. control out of calibration. 2. Temp. control set too high. 3. Obstruction in air flow or back pressure. 	<p>Re-Calibrate (Refer to Special Instructions. Para. 10.1 Thermostat Calibration).</p> <p>Adjust Setting. (Refer to Special Instructions, Para. 10.2 Temperature Adjustment).</p> <p>Correct venting.</p>

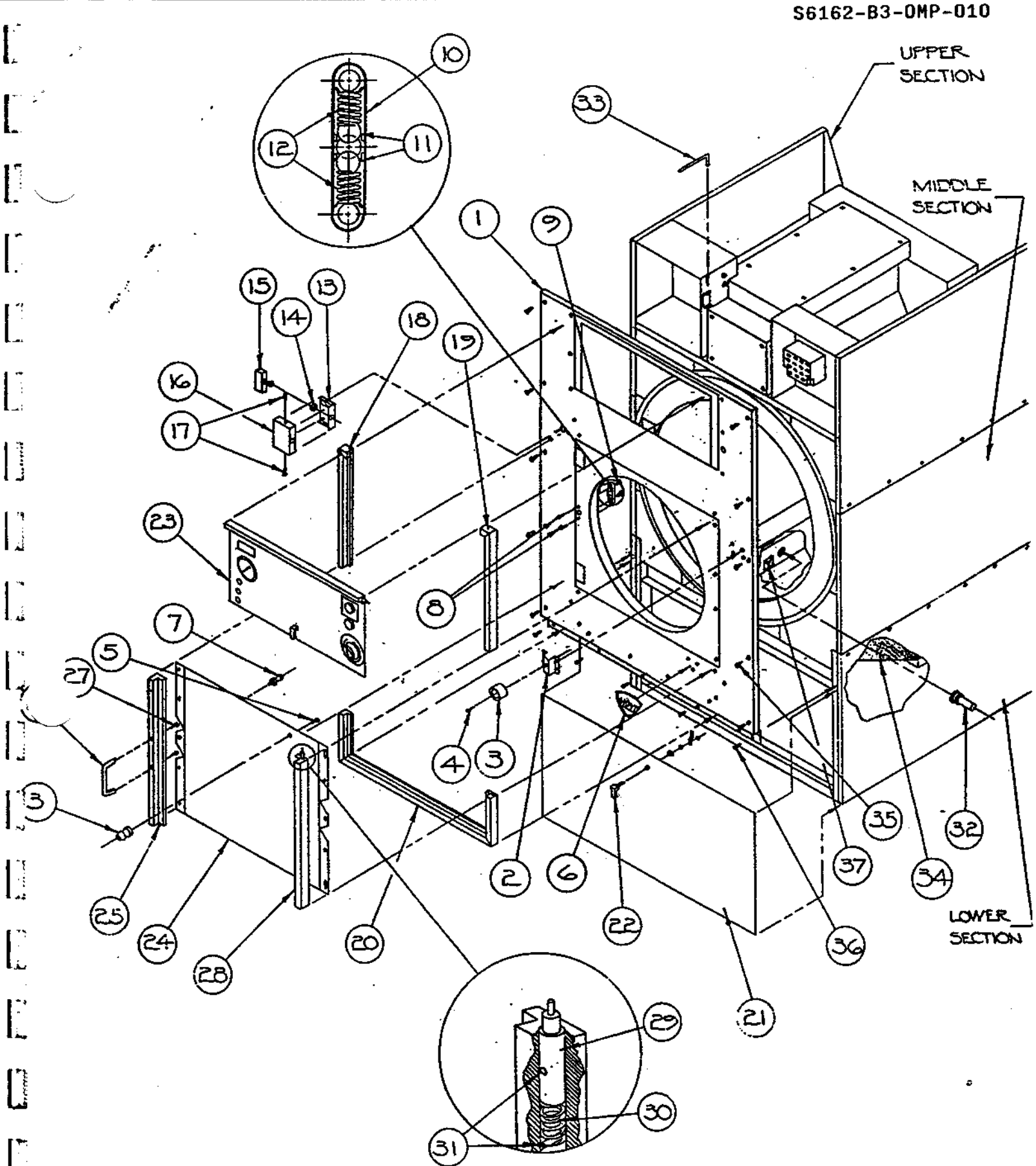


FIG. 8-1
FRONT DOOR AND PANEL ASSEMBLY

VIII PARTS LIST

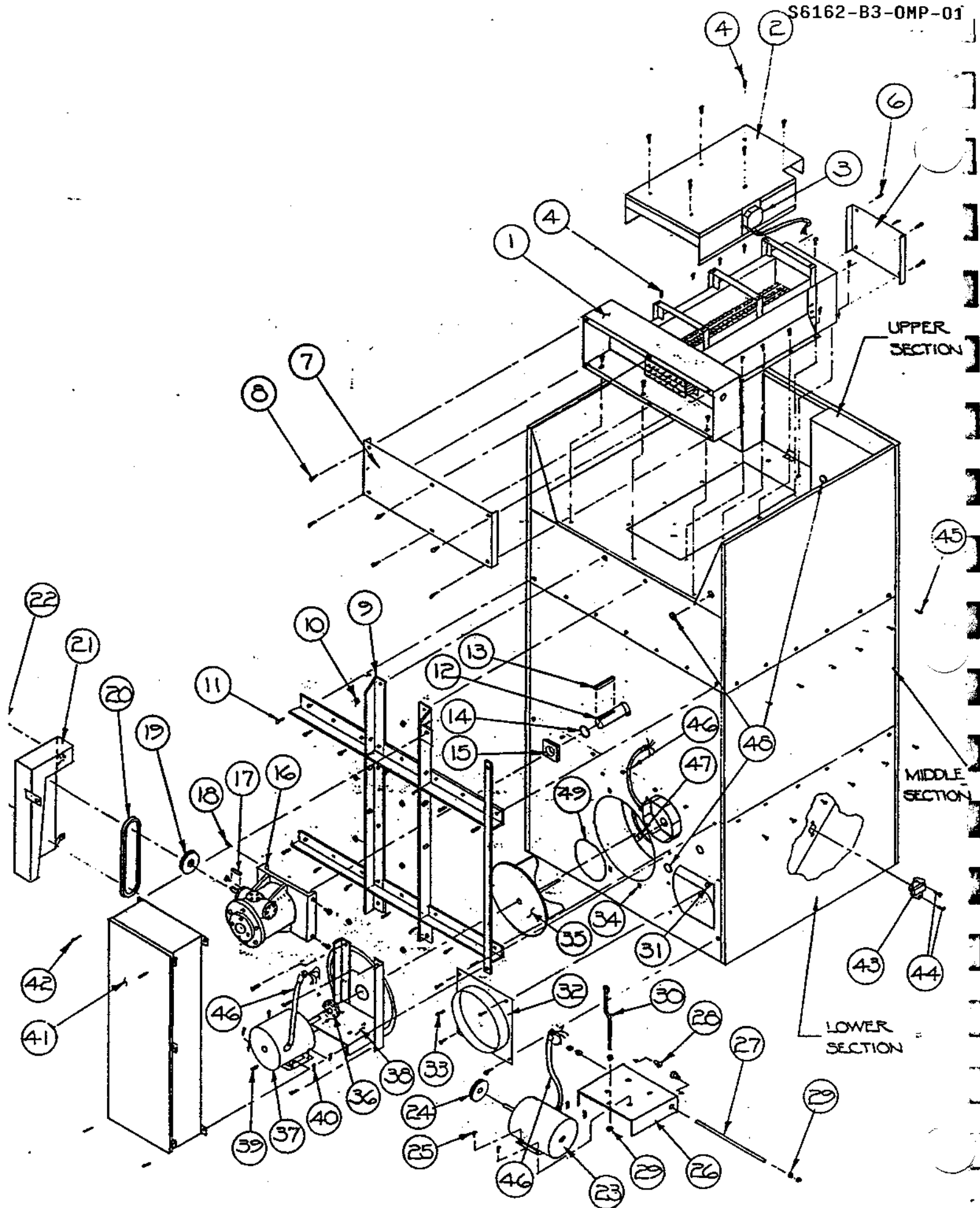
FIGURE 8-1 FRONT DOOR AND PANEL ASSEMBLY

QTY	FIGURE ITEM NO.	PART NAME	HOYT PART NO.	VENDOR PART NO.
1	1	Front Panel Assembly	11-2179-C	
1	2	Door Catch Bracket	11-2317-A	
1	3	Door Holder	8477	Eberhard Rubber #776
1 (Set)	4	1/4" - 20 x 1/2" Lg. R.H.M.S. 1/4" - 20 Hex Nut 1/4" - Lock Washer		Commercial
1	5	#10-24 x 1" Lg. Flat Head Machine Screw		Commercial
1	6	Name Plate (Hoyt)	4714-A	
1	7	Latch Pin	11-466A	
2	8	Screw 1/4" - 20 x 1/2" Lg. Flat Head Socket Cap Screw		Commercial
2	9	Spot Weld Nut 1/4 - 20	2108	
1	10	Ball Spring Housing	11-469A	
2	11	Ball (1/2" Dia.)	4312-A	
2	12	Spring	4133-A	
1	13	Door Switch Bracket	11-2273-A	
1	14	Bushing (1/2")		Heyco 1/2" Bushing
1	15	Door Switch	8476	Micro Switch #B2-2RQ181-AZ (125)
1	16	Door Switch Cover	11-2274-A	
2	17	Screw #6-32 x 3/8" Lg. Pan Head Machine-Self Tapping		Commercial
1	18	Upper Trim Side (Left)	11-841-B	Extrusion #HT-104
1	19	Upper Trim Side (Right)	11-842-B	Extrusion #HT-104
1	20	Front Trim Bottom Lower Sides	11-1634-B	Extrusion #HT-104
1	21	Lint Front Panel Assembly	TR2447B	
1	22	Latch	8138	Southco Inc. #62-10-201-30
1	23	Access Panel Assembly	11-2295-B	
1	24	Door Assembly	11-2216-C	
1	25	Door Latch Trim	11-2214-B	Extrusion #HT-104

VIII PARTS LIST

FIGURE 8-1 FRONT DOOR AND PANEL ASSEMBLY - Continued

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	26	Door Handle	4704-A	National Lock #61-664
2	27	Screw 1/4 - 20 x 1 1/4" Lg. Flat Head		Commercial
1	28	Door Hinge Trim	11-844-B	Extrusion #HT-104
2	29	Hinge Pin	11-881-A	
2	30	Spring	4133-A	
4	31	3/16" x 3/4" Roll Pin		Commercial
1	32	Cool Down Temperature Switch	8483	
1	33	Access Panel Support Rod	11-912-A	
1	34	Lint Filter Assembly	11-892-A	
14	35	Screw #10-32 x 1/2" Lg. Self-Tapping S.S.		Commercial
5 (Sets)	36	Screw #10-32 x 1/2 Lg. S.S. #10 Flat Washer S.S. #10 - 32 Hex Nut S.S.		
1	37	Clip - Temperature Sensor Bulb		



VIII PARTS LIST

FIGURE 8-2 REAR VIEW PARTS

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	1	Heater Box Heating Element Assembly	TR-1870-C	
1	2	Heater Box Cover	TR-1880-A	
1	3	Heater Hi Limit Harness Assembly	112329A	
19 (Sets)	4	1/4" - 20 x 3/4" Hex Head Cap Screws S.S. 1/4" Lock-Washer S.S. 1/4" Flat Washer S.S.		Commercial
1	5	Heater Box Front Enclosure Cover	TR-1441-A	
4 (Sets)	6	1/4" - 20 x 3/4" Hex Head Cap Screws S.S. 1/4" Lock-Washer S.S. 1/4" Flat Washer S.S.		Commercial
1	7	Heater Box Control Enclosure Cover	TR-1440-A	
6 (Sets)	8	1/4" - 20 x 3/4" Hex Head Cap Screws S.S. 1/4" Lock Washer S.S. 1/4" Flat Washer S.S.		Commercial
1	9	Bearing Housing Support Assembly	TR-1565-B	
8 (Sets)	10	3/8" - 16 Hex Nuts S.S. 3/8" Lock Washers S.S. 3/8" Flat Washers S.S.		Commercial
14 (Sets)	11	1/4" - 20 x 1" Lg. Hex Head Cap Screws S.S. 1/4" Lock-Washer S.S. 1/4" Flat Washer S.S.		Commercial
1	12	Spider & Trunnion Assembly	12-2569-B	
1	13	Square Key	3470	
1	14	Pulley Spacer	11-162-A3	
1	15	Felt Seal	3666	
1	16	Main Bearing Reducer Housing (Complete)	3394B 9534	
1	17	Keyway (3/16" x 1 3/8" Lg.)		Commercial
4 (Sets)	18	1/2 - 13 x 1 1/2" Lg. Hex Head Bolt S.S. 1/2" Lock Washer S.S. 1/2" Flat Washer S.S.		Commercial
1	19	Reducer Housing Pulley with Tapered Bushing (4.7 P.D.)	7836	

SEE ATTACHED.

VIII PARTS LIST

FIGURE 8-2 REAR VIEW PARTS - Continued

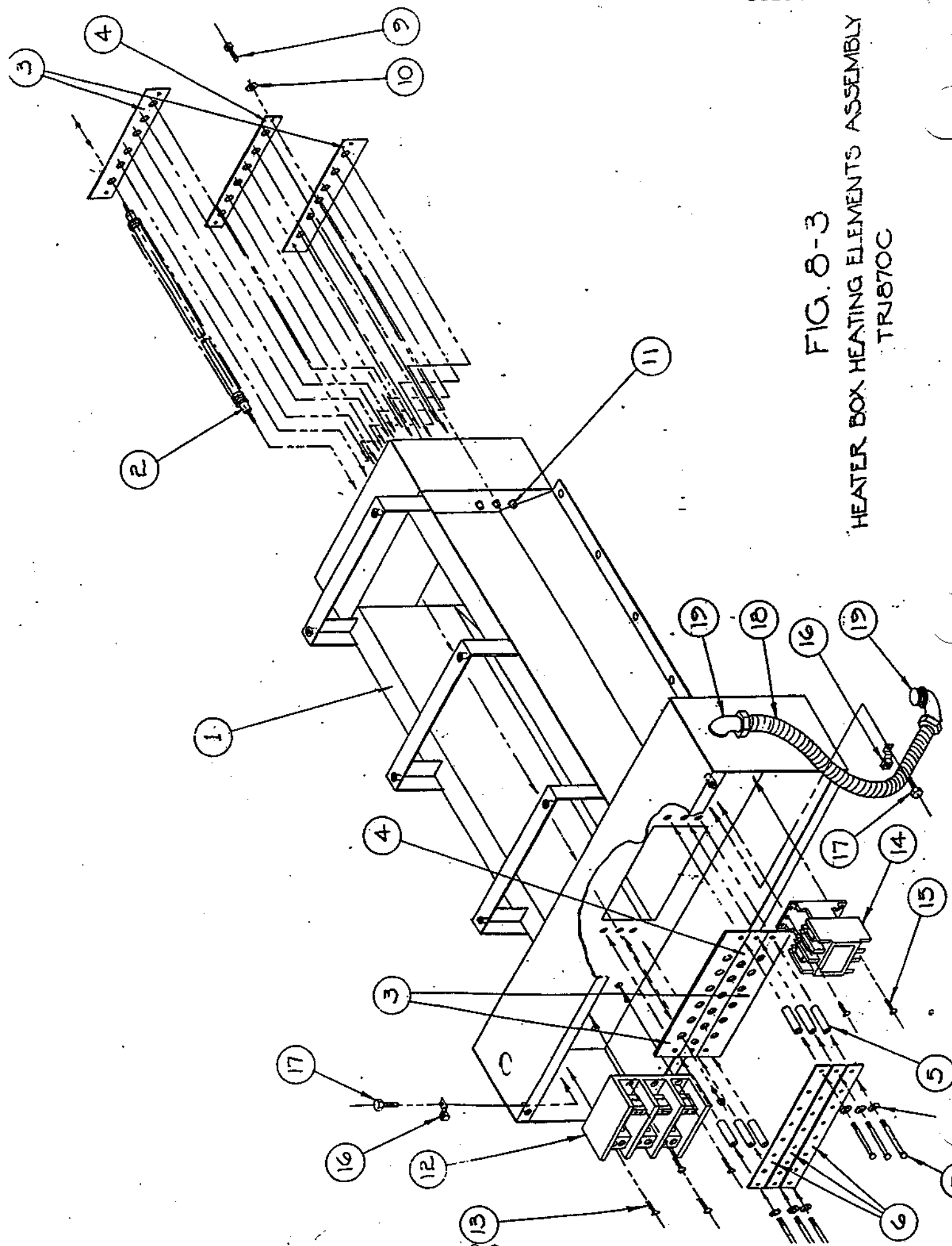
QTY	FIGURE ITEM NO.	PART NAME	HOYT PART NO.	VENDOR PART NO.
1	20	Belt (37")	7837	AV-Belt 4L370
1	21	Belt Guard Assembly	TR-1873-B	
2 (Sets)	22	#8 - 32 x 1 1/2" Lg. Machine Screw S.S. #8 - 32 Hex Nut #8 Lock Washer #8 Flat Washer		Commercial
1	23	Basket Motor	8535	Franklin 1301221400
1	24	Motor Pulley (3.2 P.D.)	3668A	
4 (Sets)	25	5/16" - 18 x 1" Lg. Hex Head Bolt S.S. 5/16" Lock Washer 5/16" Flat Washer		Commercial
1	26	Motor Mount	57-170A	
1	27	Pivot Rod	57528A	
2	28	Plastiguide Bushing	57-477-A	
6	29	3/8" - 16 Hex Head Nut S.S.		Commercial
1	30	Belt Tensioner Rod	3667-A-2	
1	31	Air Flow Sensor	8484	Warren #LS6112
1	32	Exhaust Collar Plate Assembly	TR-1568-A	
5 (Sets)	33	1/4 - 20 x 3/4" Lg. Hex Head Bolts S.S. 1/4" Lock Washer S.S. 1/4" Flat Washer S.S.	TR-1568-A	
4	34	3/8" - 16 Caged Nut		Commercial
1	35	Impellar with Cup Point Set Screws	57237-B1	
1	36	Felt Seal	3782-A	
1	37	Fan Motor	8917	Franklin 1303007402
1	38	Fan Motor Bracket Assembly	4365-B	
4	39	3/8 - 16 x 1" Lg. Hex Head Bolt S.S.		Commercial
4 (Sets)	40	5/16" x 18 x 1" Lg. Hex Head Bolt 5/16" - 18 Hex Nut 5/16" Lock-Washer 5/16" Flat Washer		Commercial

VIII PARTS LIST

FIGURE 8-2 REAR VIEW PARTS - Continued

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	41	Electrical Box Assembly	11-2258B	
4 (Sets)	42	1/4 - 20 x 1" Lg. Hex Head Bolt S.S. 1/4" - 20 Hex Nut S.S. 1/4" Lock Washers S.S. 1/4" Flat Washer		
1	43	Lint Chamber Hi-Limit Switch	7700	Elmwood #L200-2.085/12
2 (Sets)	44	Screw #6 - 32 x 3/8" Lg. R.H.M.S. Hex Nut #6 -32 Lock Washer #6		Commercial
24 (Sets)	45	1/4 - 20 x 3/4 Hex Head Bolts S.S. 1/4" Lock Washer S.S. 1/4" Flat Washer S.S.		
3	46	1/2" Liquid Tight Conduit x 14" Lg. with 2 90° Elbows		Commercial
1	47	Bushing	8616	Heyco #SB-1.093-14
3	48	Grommet	8493	Minor Rubber #AN931-3-12
1	49	Cover Plate	7654A	

FIG. 8-3
HEATER BOX HEATING ELEMENTS ASSEMBLY
TR1870C



VIII PARTS LIST

FIGURE B-3 HEATER BOX HEATING ELEMENTS ASSEMBLY (TR1870-C)

QTY	FIGURE ITEM NO.	PART NAME	HOYT PART NO.	VENDOR PART NO.
1	1	Finned Tube Heater Box Welding Assembly	TR1438C	
18	2	Heating Element/with #8-32 Hex Nuts and Flat Washers (1950 Watts)	7823	Chromalox FTI-27412VWXX-
4	3	Heating Element Bracket	TR-1820-B-1	
2	4	Heating Element Bracket	TR-1820-B-2	
6	5	Heating Element Support Standoff	TR-1818-A	
3	6	Heating Element Support	TR-1819-B	
6	7	1/4" - 20 x 2 1/2" Lg. Hex Head Bolt		Commercial
6	8	1/4" Flat Washer		Commercial
6	9	1/4" - 20 x 3/4" Lg. Hex Head Bolt		Commercial
6	10	1/4" Flat Washer		Commercial
28	11	1/4" - 20 Fasteners	7821	Creative Eng. ES2520
1	12	Power Distribution Block	8802	Gould #67063
4 (Sets)	13	#10 - 24 x 3/4" Lg. Pan Head Mach. Screws #10 Lock Washer #10 Hex Head Nut		Commercial
1	14	Heater Contactor	8014	GE#CR353FF3BA1
2 (Sets)	15	#10 - 22 x 1/2" Lg. Pan Head Mach. Screws #10 Lock Washer #10 Hex Head Nut		Commercial
2	16	Ground Stud	8345	IlSCO Stud SLU-70
2 (Sets)	17	1/4 - 20 x 3/4" Hex Head Cap Screws 1/4" Flat Washer 1/4" Hex Head Nut		Commercial
1	18	1/2" Liquid Tight Conduit x 30" Lg.		Commercial
2	19	1/2" Liquid Tight 90° Elbow Connector		Commercial

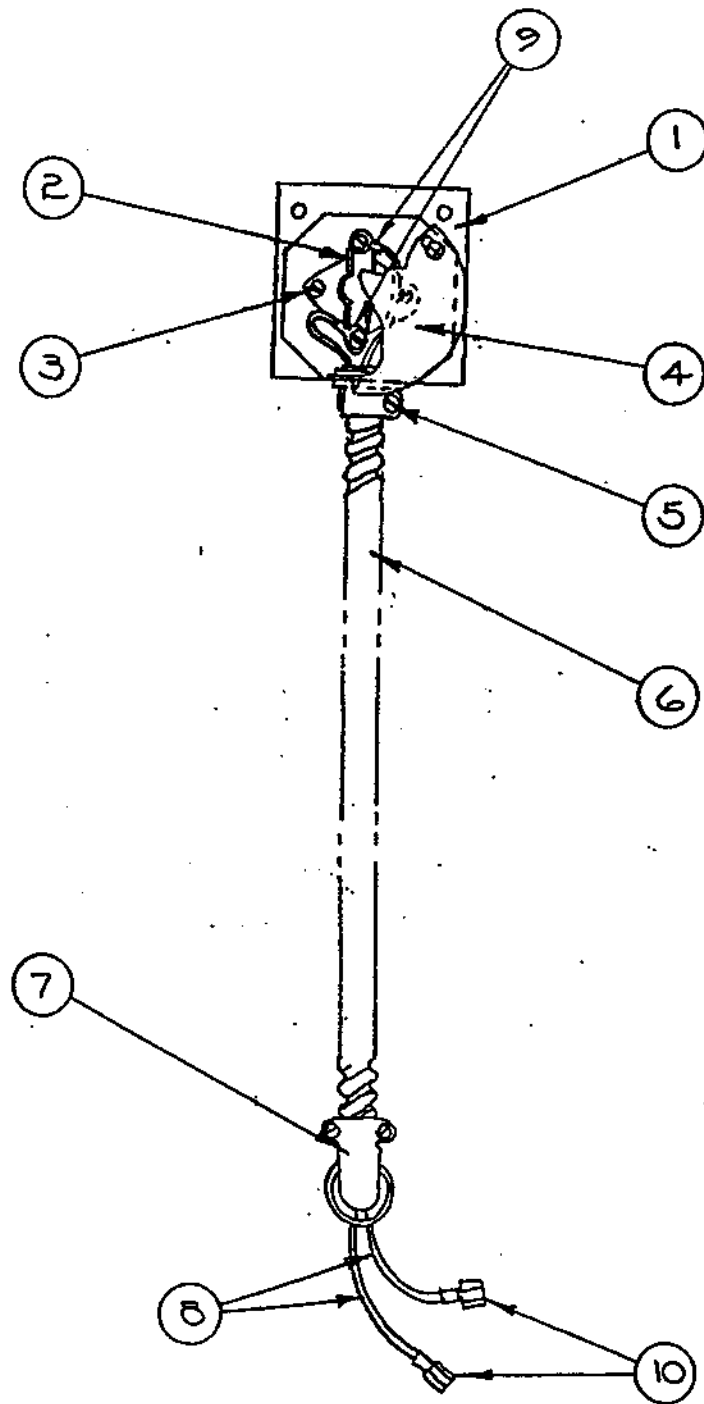


FIG. 8-4
HEATER HI-LIMIT HARNESS ASSEMBLY
112329A
R-10

VIII PARTS LIST

FIGURE 8-4 HEATER HI LIMIT HARNESS ASSEMBLY (112329A)

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	1	Hi Limit Box Welding Assembly	11-2335A	
1	2	Heater Box Hi Limit Switch	4299	Elmwood Sensor 25132623-619
2 (Sets)	3	Screw #6 - 32 x 3/8" Lg. R.H.M.S. Hex Nut #6 - 32 Lock Washer #6		Commercial
1	4	Cover Plate	7654	
1	5	1/2" B.X. Straight Connector		Commercial
1	6	1/2" B.X. Conduit 18" Lg.		Commercial
1	7	1/2" x 90° B.X. Elbow Connector		Commercial
2	8	Wire #14 AWG Orange x 35" Lg. Stranded Copper		Commercial
2	9	1/8" Copper Eyelet Connector		Commercial
2	10	1/4" Female Spade Connector		Commercial

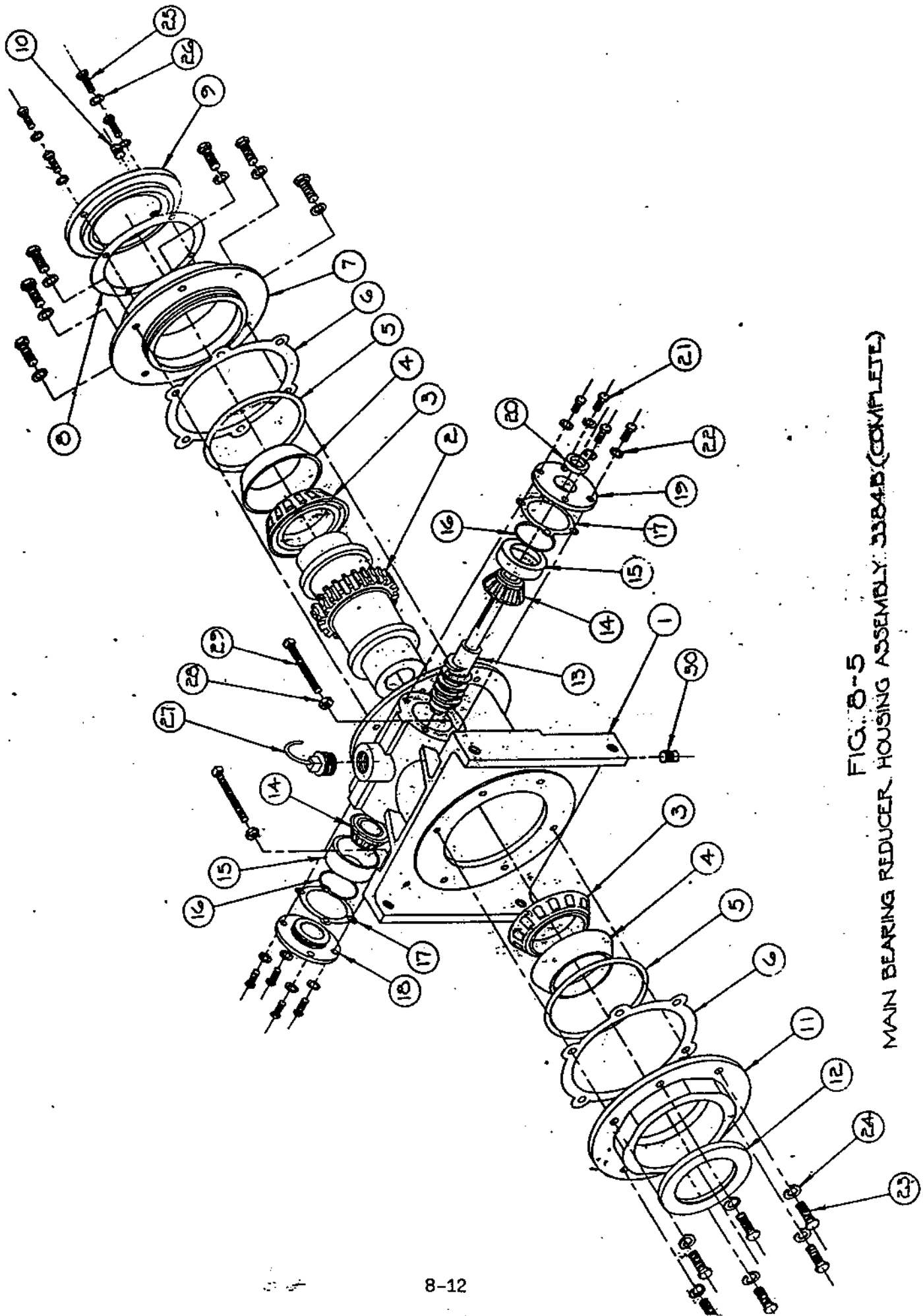


FIG. 8-5
MAIN BEARING REDUCER HOUSING ASSEMBLY 3384B (COMPLETE)

22 Oct 99

From: 9783

To: 9452

Subj: TR 99-683

Ref: (a) Phonecon btw J. Bowen, NSWCCD-SSES 9783 and Bill Cotter, Hoyt Corp.

1. Per ref (a), NSN 3020-01-432-5937, worm gear, Hoyt part number 3716B, is in fact available for procurement. However, next higher assembly, reduction gear assembly, Hoyt part number 3384B, has been discontinued and replaced by part number 9534. Some replacement parts for part number 3384B are no longer available and others, such as part number 3716B, will be obsolete once Hoyt's on hand stock is depleted.

2. In the event a repair part is not available the entire reduction gear must be replaced using a kit, Hoyt part number SK 1911-1.

2. Code 9783 TPOC is J. Bowen, X7925.

Bob:

NEW CHANGE TO THE HOYT 50LB DRYER.

PLS PASS THE WORD.

DAVE.

OPTIONAL FORM 99 (7-90)		# of pages ▶ 1
FAX TRANSMITTAL		
To	From	
BOB BURRIDGE	D. Pounce	
Dept./Agency	Phone #	
NEXCOM	(757) 443-2524	
Fax #	Fax #	
(419) 556-5726	(757) 443-2520	
NSN 7540-01-317-7388	5088-101	GENERAL SERVICES ADMINISTRATION

SEND CONFIRMATION REPORT

12- 3-99 14:42
757 444 1319
NEXCOM
1

JOB	REMOTE STATION	START TIME	DURATION	PAGES	MODE	RESULTS
443	619 556 5726	12- 3-99 14:38	0'43"	0/ 1	EC	COMMUNICATION ERROR E202
443	619 556 5726	14:42	0'47"	1/ 1	EC	EC 2400 COMPLETED EC 9600 RESEND 0951

TOTAL	1'30"	1/ 1
-------	-------	------

NOTE:

EC ERROR CORRECTION
96 9600 BPS SELECTED
48 4800 BPS SELECTED

CR CONFIDENTIAL RECEIVE
PI POLL-IN
PO POLL-OUT

MP MULTI-POLL
SA SUBADDRESS
PW PASSWORD

BC BROADCAST
MB MAILBOX
RD REMOTE DIAGNOSTICS

22 Aug 1962

4-1510- 0284

b6 b7C 9452

Subj: TR 91-68,1

Ref: (a) Phonemail b/w J. Bowen, NSWCCD-SSES 9783 and Bill Catter, Hoyt Corp

1 Per ref (c), NSN 3020-01-432-5037, worm gear, Hoyt part number 3716B, is in fact available for procurement. However, next higher assembly, reduction gear assembly, Hoyt part number 4384B, has been discontinued and replaced by part number 9534. Some replacement parts for part number 4384B are no longer available and others, such as part number 3716B, will be obsolete once Hoyt's on hand stock is depleted.

2. In the event a repair part is not available the entire reduction gear must be replaced using a kit. Hoyt part number SK 1911.

2. Code 9783 TPOK is J Brown. X7026

३०४

NEW CHANGE TO THE HOYT SALS DRYER.
PLS FIND THE WORK.

David.

FAX TRANSMITTAL

FOR: BURLINGAME, D. House

FROM: NEXCOM (757) 443-2524

TO: (419) 556-5266 (757) 443-2524

DATE: 10/1/98

TIME: 10:10 AM

RE: [illegible]

VIII PARTS LIST

FIGURE 8-5 MAIN BEARING REDUCER HOUSING ASSEMBLY ~~3384B~~ (COMPLETE)

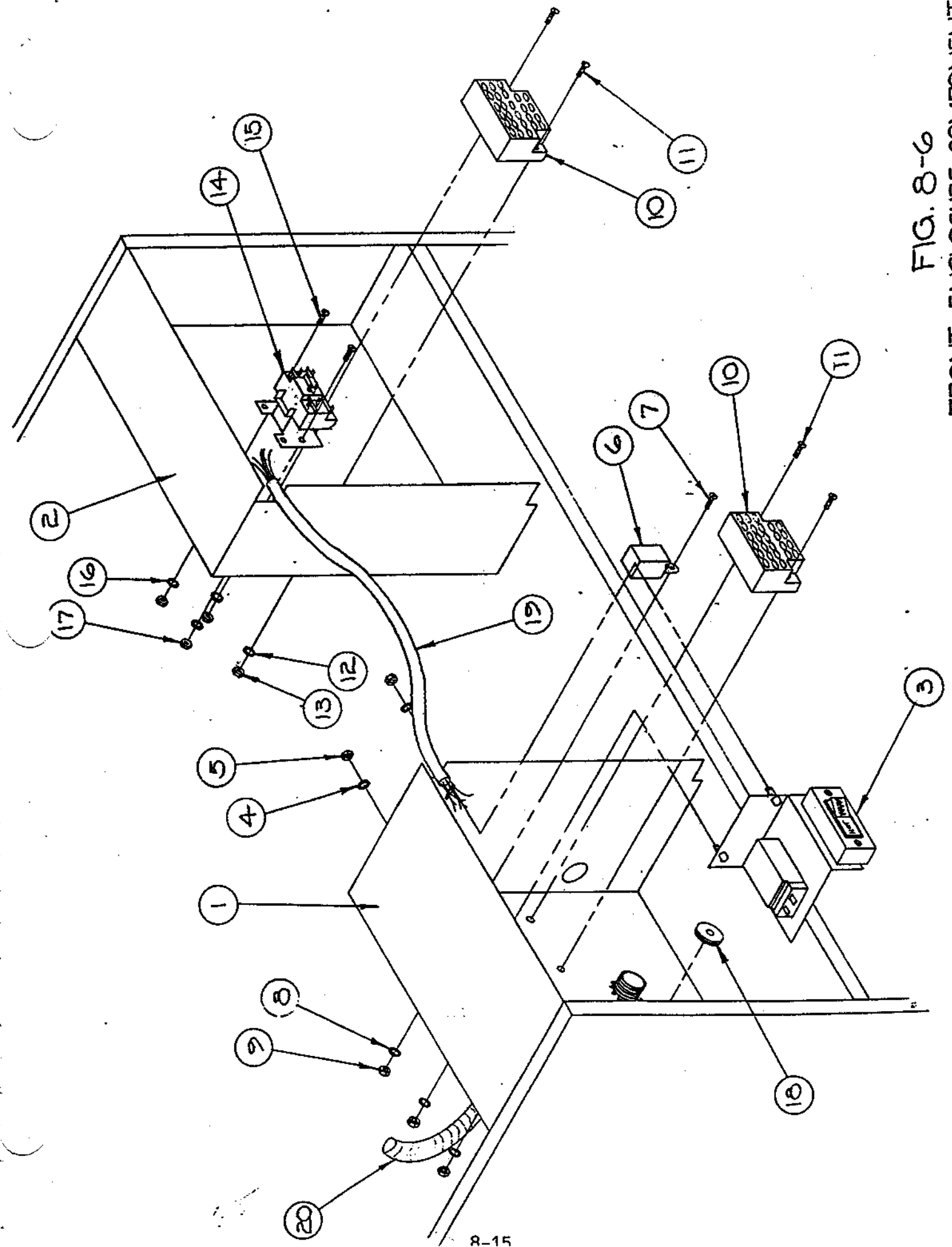
9534

QTY	FIGURE ITEM NO.	PART NAME	HOYT PART NO.	VENDOR PART NO.
1	1	Main Bearing Reducer Housing	3383-E	
1	2	Worm Gear	3715C1	
2	3	Large Bearing Cone	3717-1	Timken #29585
2	4	Bearing Cup (Large)	3717-A2	Timken #29520
2	5	"O" Ring (Large)	3711	Anchor #0-303-23
2	6	Shim (Large, Set of 6)	3380	Timken #K22005
1	7	Reducer Outer Bearing Housing	3377C	
1	8	Reducer End Cap Gasket	3381B	
1	9	Reducer Housing End Cap	3378-A2	
1	10	Oil Level Plug	3663	
1	11	Inner Bearing Housing	3379	
1	12	Seal	3420	Garlock #1633
1	13	Worm Gear	3716B	
2	14	Small Bearing Cone	3421-1	Timken #11590
2	15	Small Bearing Cup	3421-2	Timken #11520
2	16	Small Cover Seal	3712A	Anchor #0-310-26
2	17	Small Shim	3382A	Brass-Timken #K-20705
1	18	Reducer Closed Cover	3375A	
1	19	Reducer Open Cover	3374A1	
1	20	Small Oil Seal	3422	Vicor #60098
8	21	1/4" - 20 x 5/8" Hex Head Cap Screw		Commercial
8	22	1/4" Lock - Washer		Commercial
12	23	3/8" - 16 x 1" Hex Head Cap Screw		Commercial
12	24	3/8" Lock - Washer		Commercial
4	25	1/4" - 20 x 3/4" Hex Head Cap Screw		Commercial
4	26	1/4" Lock - Washer		Commercial
1	27	Reducer Level Gage/Plug Plug W Vent	2329A	

VIII PARTS LIST

FIGURE 8-5 MAIN BEARING REDUCER HOUSING ASSEMBLY 3384B (COMPLETE)-Con't.

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
2	28	5/16" - 18 Hex Nut		Commercial
2	29	Cylinder Adjusting Screw	3471	
1	30	Drain Plug	3664	Pipe Plugs #FDB381856A

FIG. 8-6
FRONT ENCLOSURE COMPONENTS

VIII PARTS LIST

FIGURE 8-6 FRONT ENCLOSURE COMPONENTS

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	1	Left Control Enclosure	11-2226-B	
1	2	Right Control Enclosure	11-2227-B	
1	3	Temperature Control Assembly	11-1517-B	
2	4	1/4" Lock Washer S.S.		Commercial
2	5	1/4 - 28 Hex Nut S.S.		
1	6	Buzzer	6471	U.S. Controls #10187-60
1	7	#8 - 32 x 3/8" Lg. Screw R.H.M.S.		Commercial
1	8	#8 Lockwasher		Commercial
1	9	#8 Hex Nut		Commercial
2	10	Terminal Block	11-1515-A1	
4	11	#6 - 32 x 3/8" Lg. Screw		Commercial
4	12	#6 Lock Washer		Commercial
4	13	#6 Hex Nut		Commercial
1	14	Relay (Push to Start)	6105	RBM #91-161006-13000
2	15	#10 - 32 X 3/8" Lg. Screw		Commercial
2	16	#10 - Lock Washer		Commercial
2	17	#10 - 32 Hex Nut		Commercial
1	18	Grommet	8493	Minor Rubber #AN 931-3-12
1	19	Left Enclosure to Right Enclosure Wiring Harness Assembly	11-2188B	
1	20	1/2" Liquid Tight Conduit 40" Lg. with Straight and Elbow Connector		Commercial

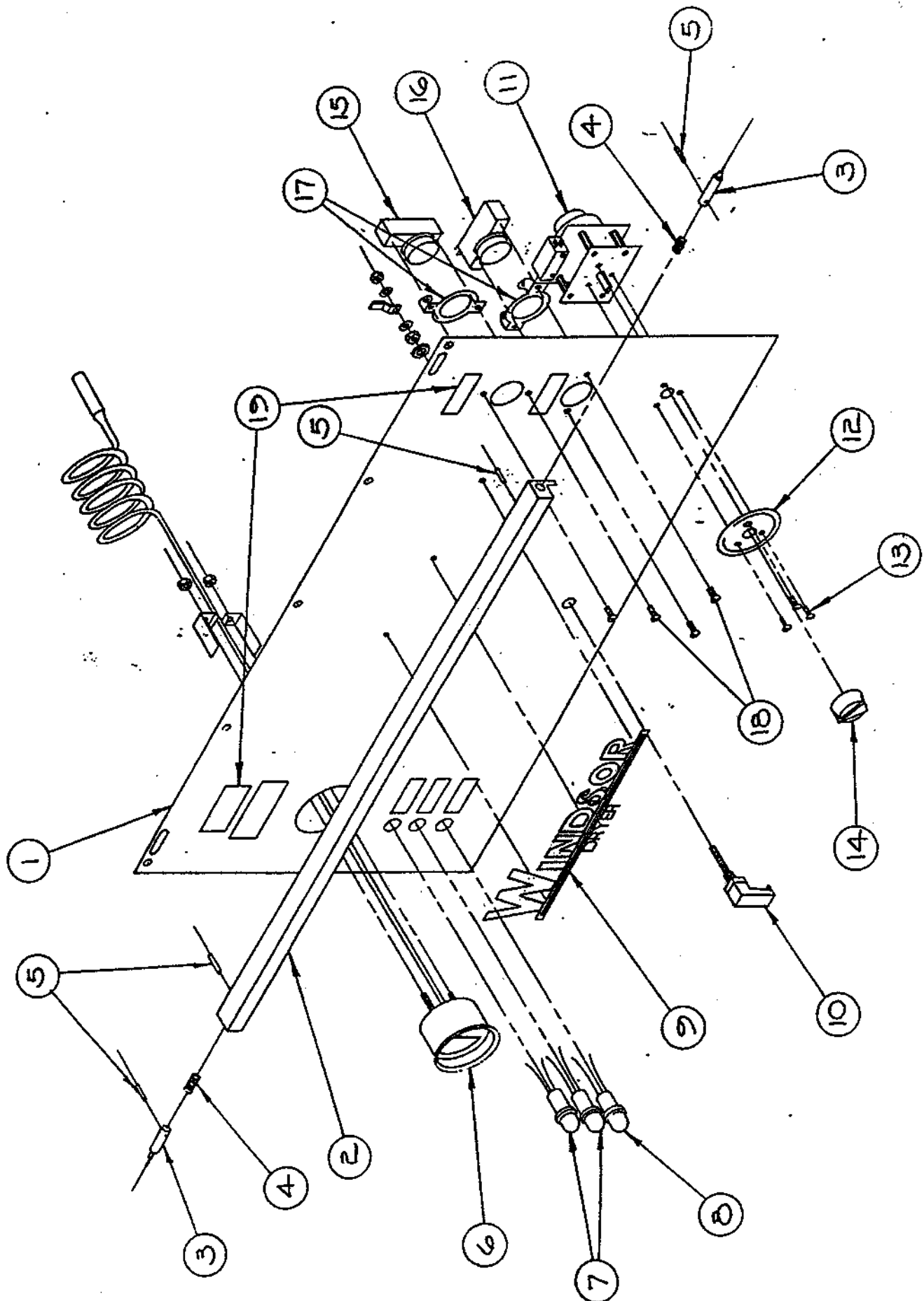


FIG. 8-7
ACCESS PANEL COMPONENTS

VIII PARTS LIST

FIGURE 8-7 ACCESS PANEL COMPONENTS

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	1	Access Panel Finished Detail	11-2318-A	
1	2	Door Hinge Trim	11-845-B	Extrusion #HT-104
2	3	Hinge Pin	11-881-A	
2	4	Spring	4133-A	Commercial
4	5	Roll Pin (3/16" x 3/4" Lg.)		
1	6	Gauge	8478	Weiss #200B3-5111
2	7	Bulb (Red)	4314-A	Omni-Glow #1010-A1
1	8	Bulb (Green)	4316-A	Omni Glow #1010-A5
1	9	Windsor Dryer Decal with Clips	5615	
1	10	Latch	8138	Southco #62-10-201-30
1	11	Timer	3781	Cramer Timer #FL3-CODE 22701-3
1	12	Timer Dial Plate	7501	
3	13	Screw #8-32 x 3/8" Lg. R.H.M.S.		Commercial
1	14	Knob	4313	
1	15	Switch (Start)	4642	Micro #1PLG
1	16	Switch (Off/Reset)	8137	Micro #1PL02 (N.C.)
2	17	Switch Push Button Assembly	4658	Micro #7MA1
4	18	Screw #6-32 x 3/8" Lg. R.H.M.S.		Commercial
1	19	Decals	112316B	

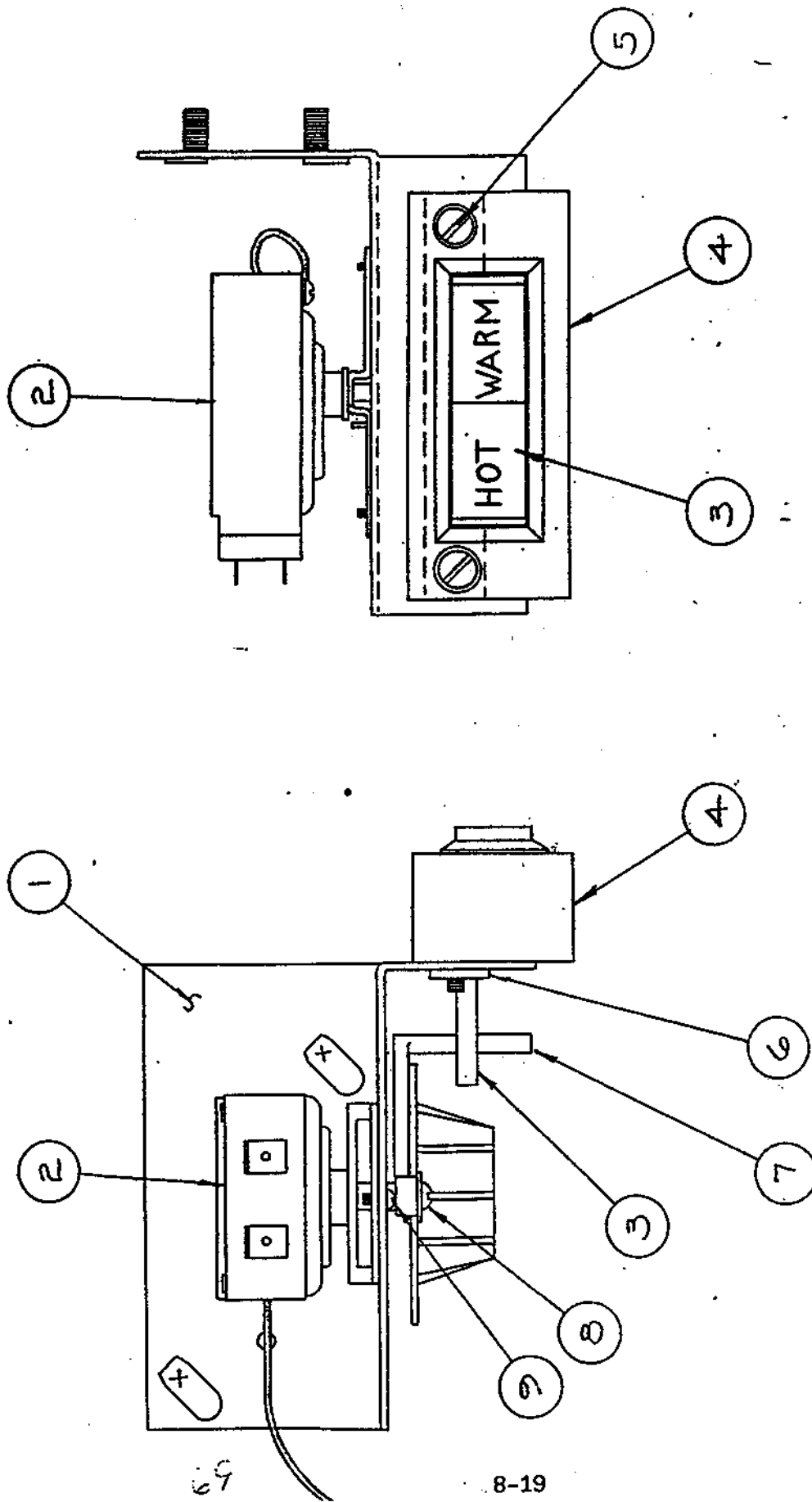


FIG. 8-8
TEMPERATURE CONTROL ASSEMBLY 11-1517-B

VIII PARTS LIST

FIGURE 8-8 TEMPERATURE CONTROL ASSEMBLY (11-1517-B)

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	1	Control Bracket	11-5111-A	
1	2	Temperature Control	3811-A	Robertshaw KX201-72
1	3	Temperature Selector Rocker	5305A	
1	4	Temperature Control Escutcheon	11-945-B	
2	5	10 - 24 x 1" Lg. R.D.H.D. Machine Screws		Commercial
1	6	Mounting Bar & Stop	11-1512-A	
1	7	Temp. Dial Adapter	5306A	
2	8	#10 - 32 x 1/2" Lg. Machine Screw with Flat Washer		Commercial
2	9	#8 - 32 x 3/8" Lg. Screw		Commercial

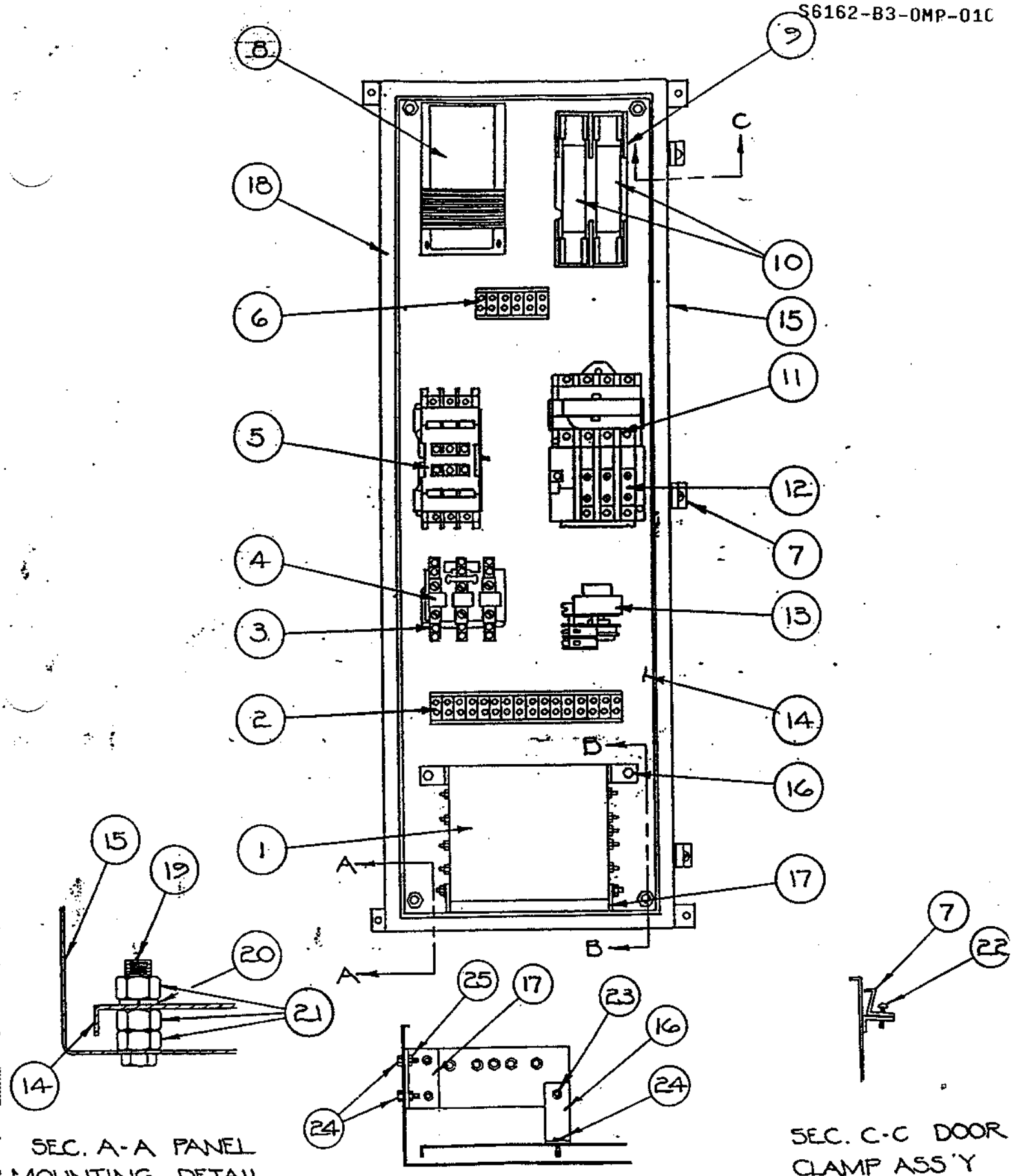


FIG. 8-9
ELECTRICAL BOX COMPONENTS
8-21

VIII PARTS LIST

FIGURE 8-9 ELECTRICAL BOX COMPONENTS

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	1	RFI Filter	8882	Corcom 30AYP6C
1	2	110V Terminal Strip	8414	Marathon #316
3	3	Thermal Overload Protector	8602	Square D #9065 Type SEO
3	4	Heater	8603	Square D #B130 (1.0 Amp)
1	5	Reversing Contactor	6557A	Elmwood #30R-D0-300
1	6	460V Terminal Strip	8409	Marathon #307
3	7	Electrical Box Door Clamp	11-2312A	
1	8	Transformer	7100	Acme #T53006
1	9	Fuse Block	8413	Bossman #1B0025
2	10	Fuse 6/10A	8487	Buss #LPS-6/10 Amp-600V
1	11	Fan Motor Starter	8135	GE #CR30GA002
3	12	Heater Coil	8536	GE #CR123C301A
1	13	Timer (Reverser)	8408	Cramer Timer #66-154-46557
1	14	Electrical Box Inside Panel	11-2257-B	
2	15	Electrical Box Ass'y	11-2332A	
2	16	RFI Rear Bracket	11-2332A	
2	17	RFI Bottom Bracket 1/4" Thk. x 3/4" Wide x 94" Lg.	11-2331A	
1	18	Gasket Closed Cell Hycar	8985	
4	19	Bolt 5/16" - 18 x 1 3/4" Lg. Hex Head S.S. (Full Thread)		Commercial
4	20	5/16" Lock Washer S.S.		Commercial
12	21	5/16" - 18 Hex Nut S.S.		Commercial
3	22	1/4" - 20 x 3/4" Pan Head Screw		Commercial
6	23	#8 - 32 Hex Nut		Commercial
6	24	1/4 - 20 X 3/4 Hex Head Cap Screw		Commercial
4	25	1/4 - 20 Hex Nut		Commercial

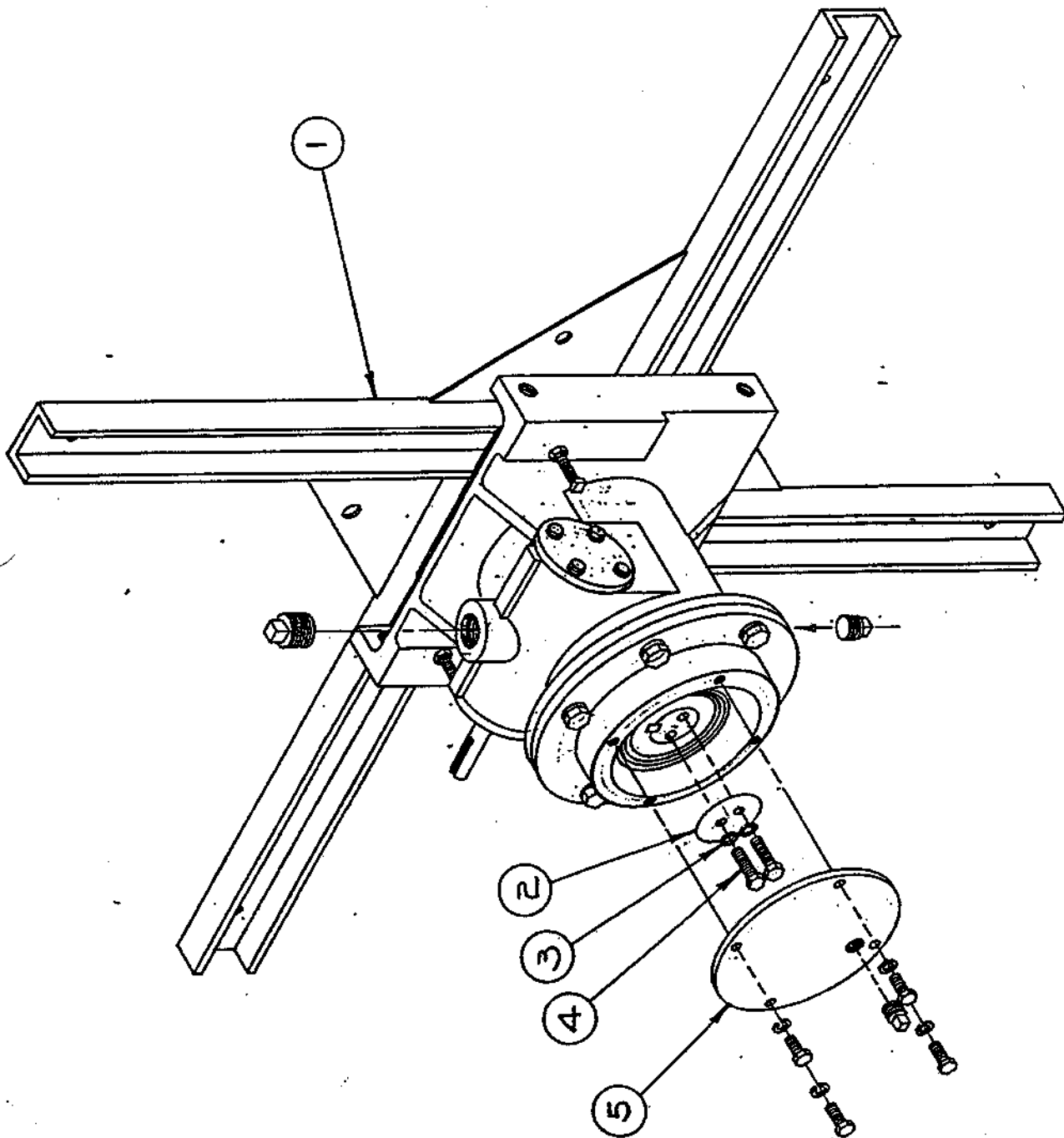


FIG. 8-10
SPINNER AND TRIMON MOUNTING PARTS

VIII PARTS LIST

FIGURE 8-10 SPIDER AND TRUNION MOUNTING PARTS

<u>QTY</u>	<u>FIGURE ITEM NO.</u>	<u>PART NAME</u>	<u>HOYT PART NO.</u>	<u>VENDOR PART NO.</u>
1	1	Spider & Trunion Assembly	57-139-C-1	
1	2	Cylinder Retainer Washer	3395	
2	3	3/8" Lock Washer S.S.		Commercial
2	4	3/8" - 16 x 1" Lg. Hex Head Bolt S.S.		Commercial
1	5	Reducer Housing End Cap	3378-A2	

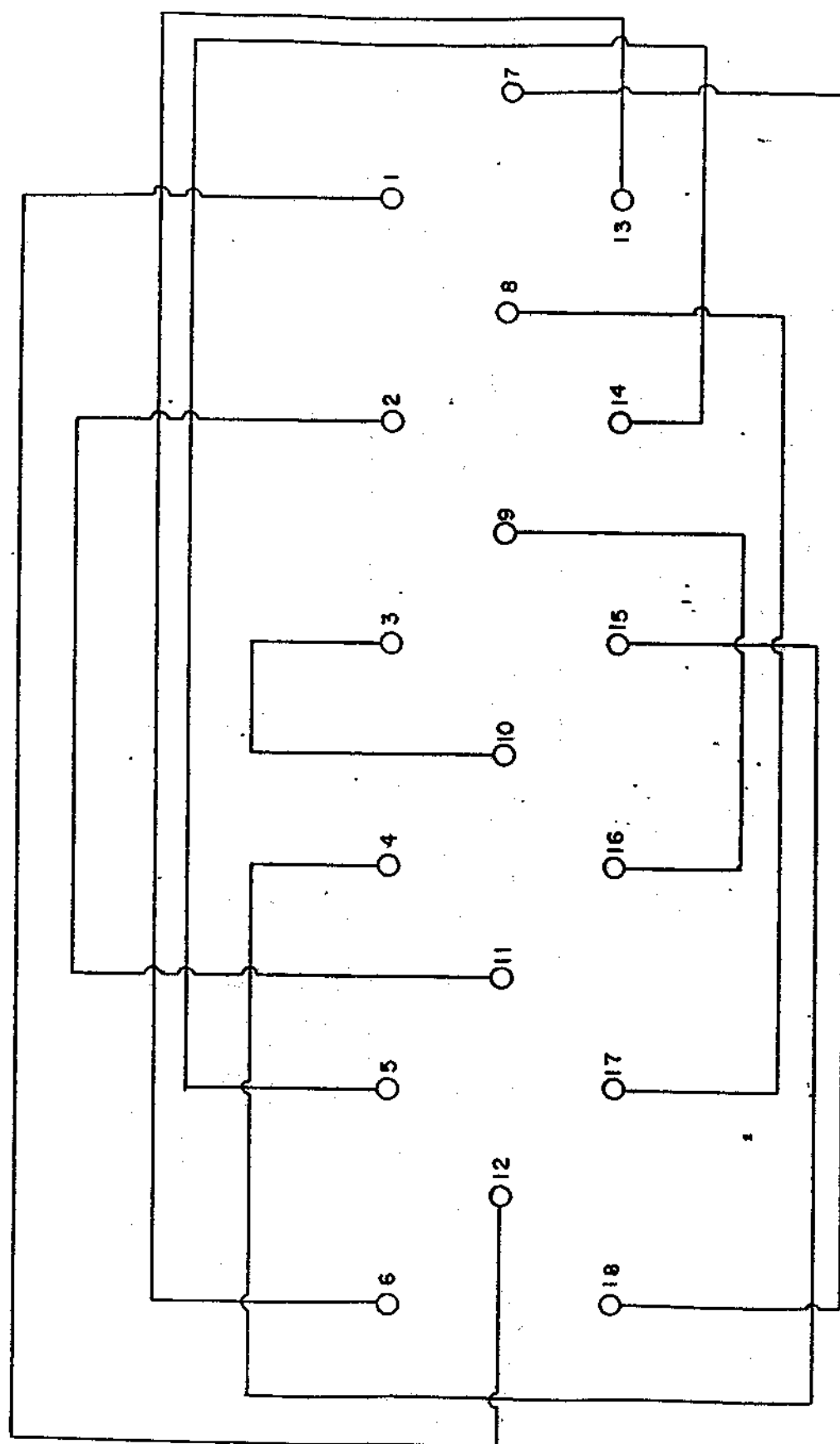


FIG. 9-1
HEATING ELEMENTS WIRING DETAILS (FRONT)

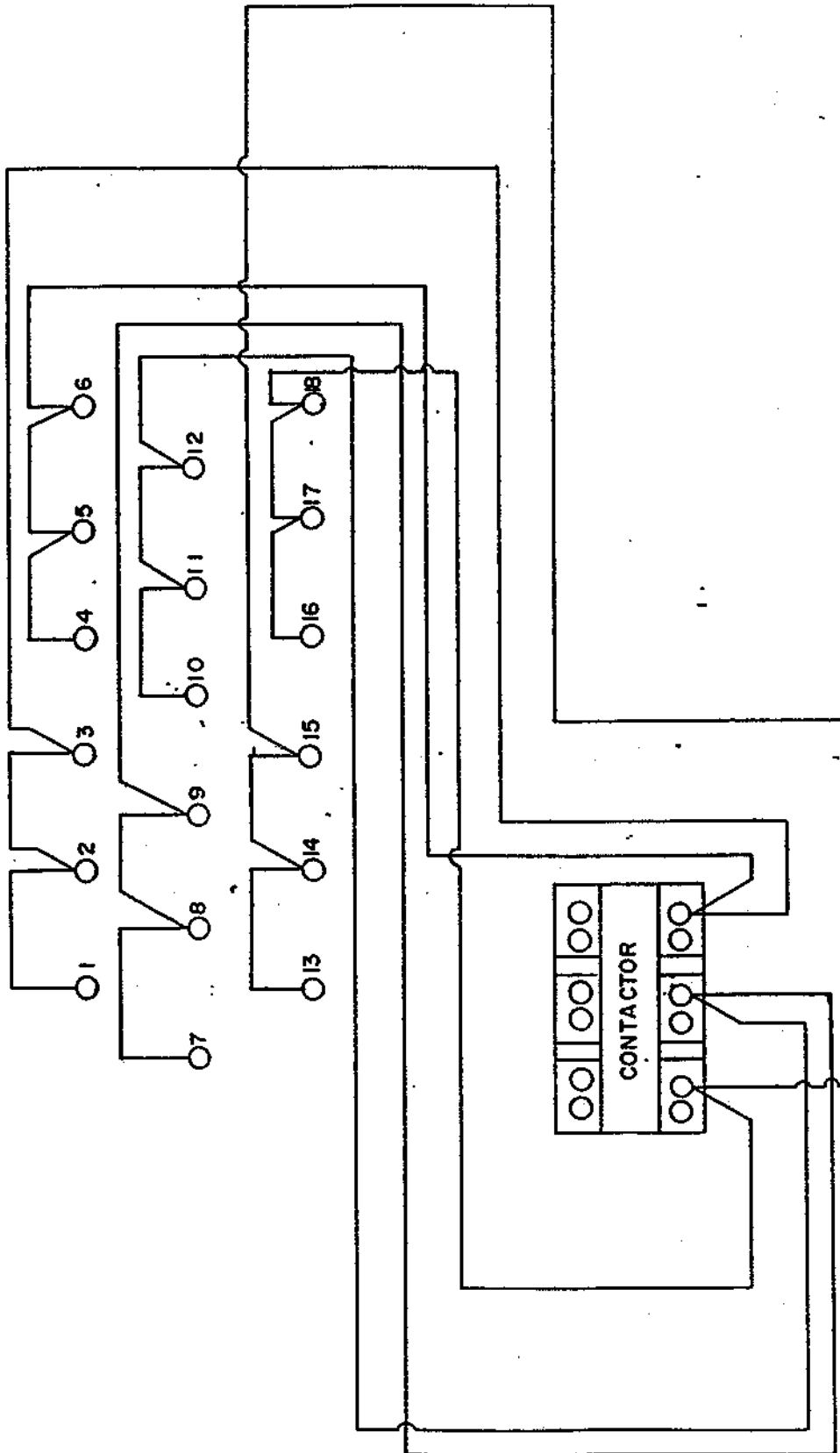


FIG. 9-2
HEATING ELEMENTS WIRING DETAILS (REAR)

COMMON TERMINAL DESIGNATION

1-2
3-4
5-6
7-8
9-10
11-12
13-14
15-16-17
18-19-20-21
22-23-24-25
26-27-28-29

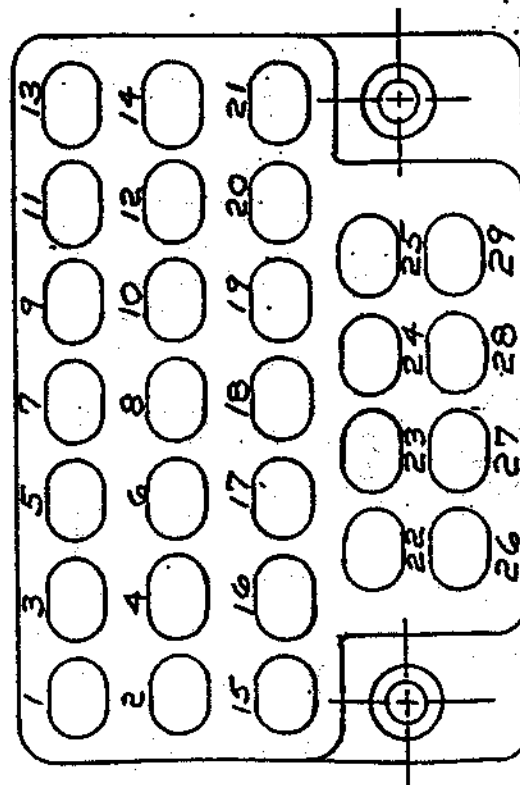


FIG. 9-3
TERMINAL BLOCK 11-1515A-1

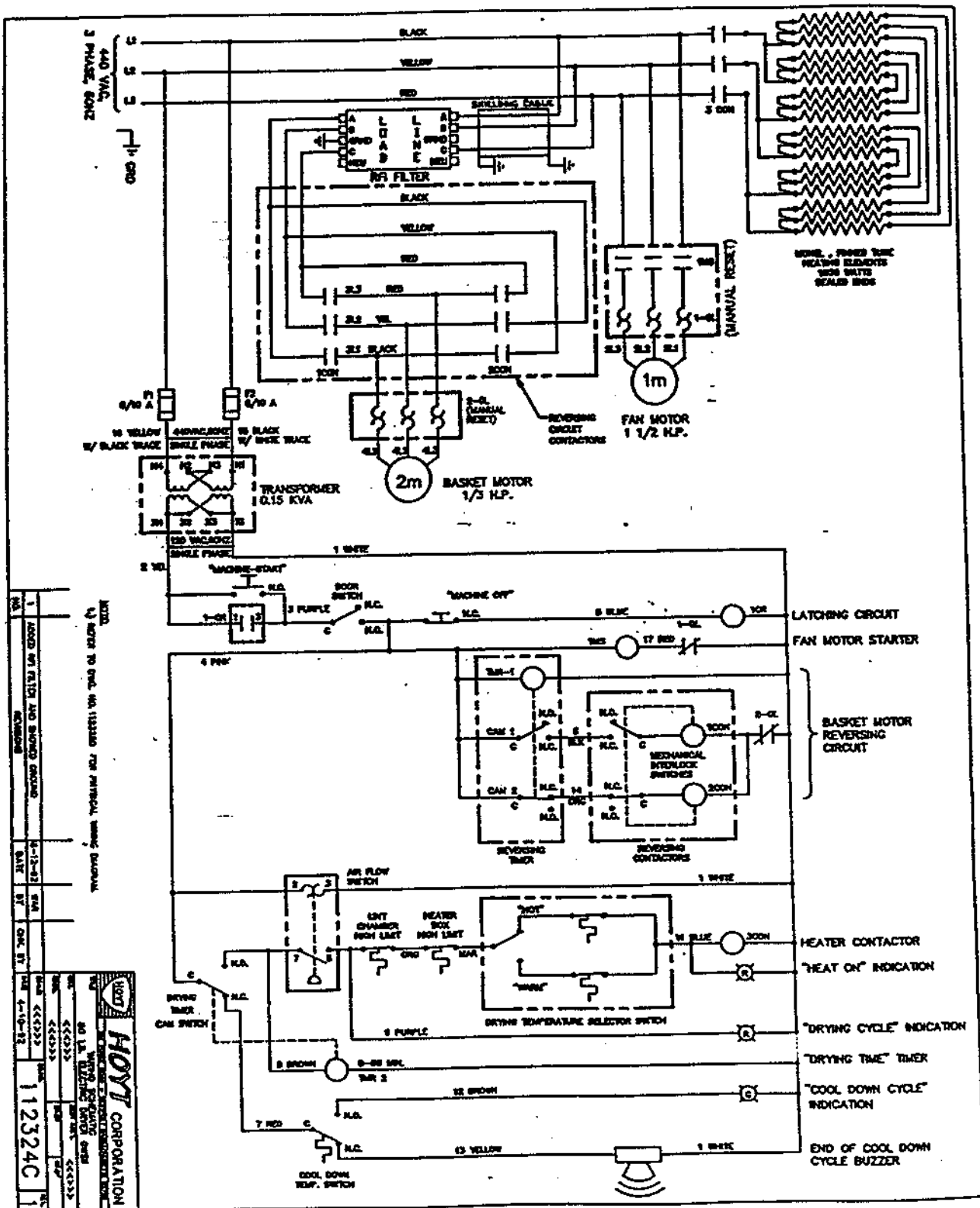


FIG 9-4

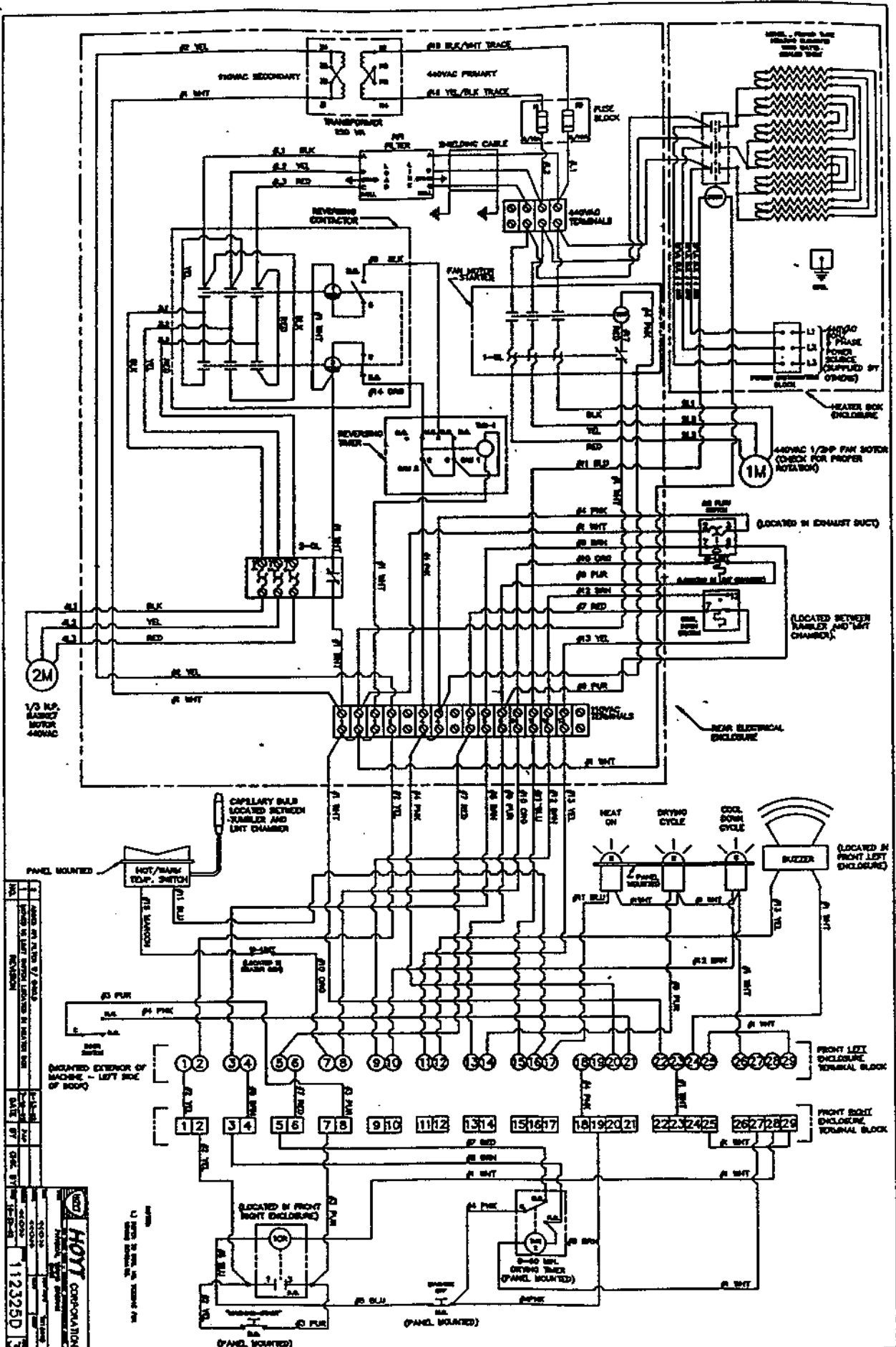
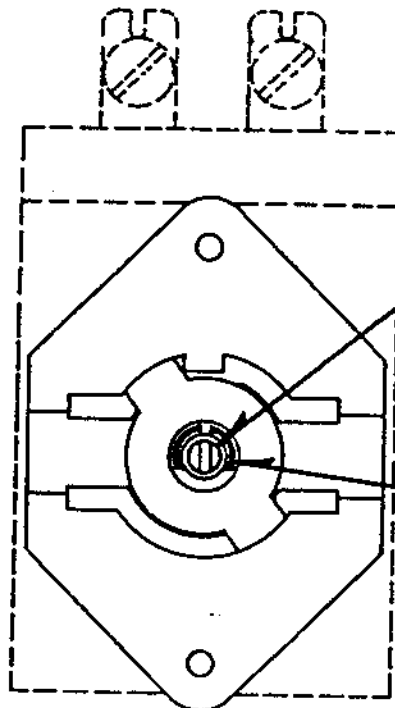
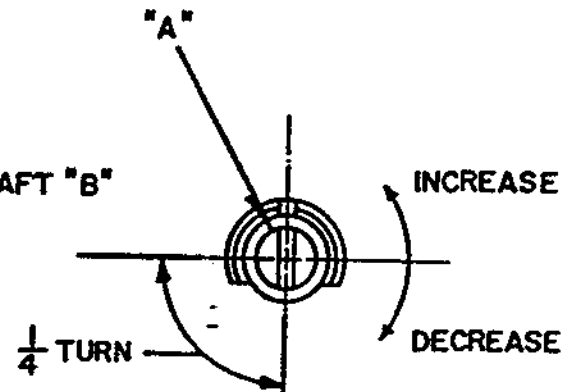


FIG 9-5
9-5



DIAL SHAFT "B"

"A"

 $\frac{1}{4}$ TURN

INCREASE

DECREASE

X Special Instructions 10.1 Thermostat Calibration

CHECKING CALIBRATION

Each Model EA Electric Thermostat is adjusted at the factory and calibrated on precision instruments to control temperatures accurately. Adjustment or recalibration is not needed unless the thermostat has been mishandled in transit, or changed or abused while in service.

To Check Calibration

- ① Use a potentiometer or a good grade thermometer to determine temperature at the location where temperature regulation is required.
- ② Turn the dial of the thermostat to a medium temperature setting.
- ③ Allow enough time for temperature to stabilize, or until several temperature readings are identical.

To Recalibrate

Remove dial from shaft "B".

Turn screw "A", clockwise to decrease and counter clockwise to increase.

Because of the many temperature ranges available in this thermostat $\frac{1}{4}$ turn of screw "A" has different values. The chart below shows the approximate value of $\frac{1}{4}$ turn of screw "A" when used on the respective temperature ranges.

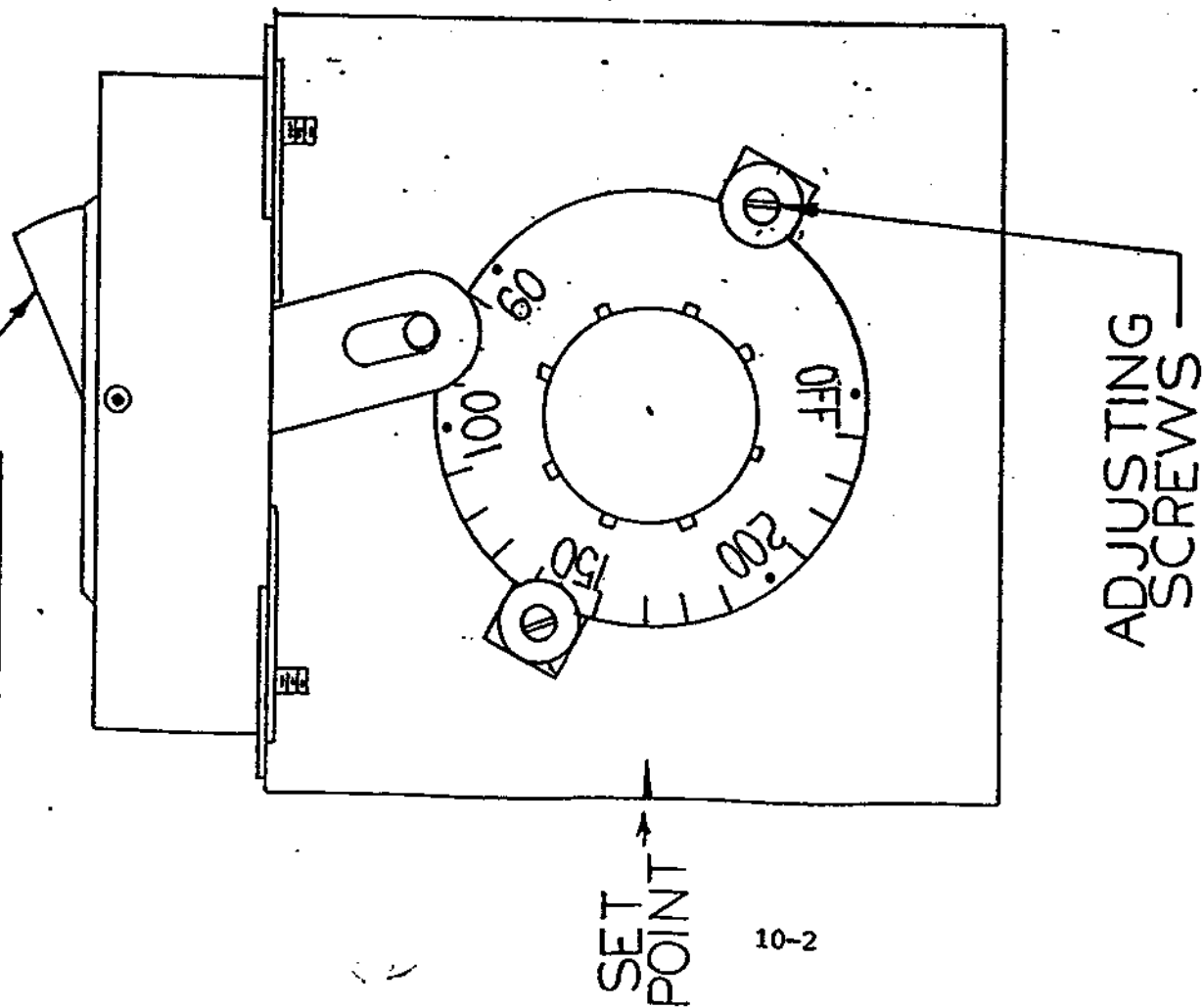
TYPE THERMOSTAT	TEMP. RANGE IN DEGREES F.	$\frac{1}{4}$ TURN IN DEGREES F.
OVEN	150° TO 550°F	35°F
DRYER	130°—180°F	14°F
ROOM CONTROL	60°—95°F	6°F

Replace dial.

After a calibration is made let the appliance operate until the temperature has stabilized, then recheck to determine whether or not the calibration has been corrected.

ROCKER BUTTON10.2 TEMPERATURE ADJUSTMENT

1. All controls are factory set and temp. adj. should not be necessary. Before making any temperature adjustment, check calibration following temp. calib. instructions enclosed.
2. Sketch shown illustrates control knob in HOT position, and the dial registering factory setting of 185°F at Set Point.
3. If it is desired to run machine at a lower temperature, depress rocker button to HOT (as illustrated), loosen adjusting screws; turn knob counter-clockwise to desired new temperature and tighten adjusting screws.
4. If it is desired to run machine at a higher temperature, repeat above steps but rotate knob clockwise to desired temperature.



TEMPERATURE ADJUSTMENT

10.4 MOTOR REWINDING DATA

BASKET MOTOR

PHASE 3 HP 1/3 TYPE 3P VOLT 208-230/460 HZ 60/50
 FRAME 56 POLE 4 RPM 1725/1425 ENCL DP TEST HZ 60

WINDING SPECIFICATION LAM 297682 MATL CRS SLOTS 36 OD 6.000 ID 3.520
 STACK LENGTH 1.125 SLOT CELL THICKNESS 00000 SLOT FILL 39.5
 CORE WDG M/A 296419 END TURN A 1.25 B 1.25 WDG GFI 300031000

TYPE	SPAN	TURNS/COIL	Q	MAGNET WIRE	WGT	25DEG	C RES	NOM
WDG 1	7	156-156-156	1	0995350250	01.350	27.69	- 30.60	29.15
WDG 2	7	156-156-156	1	0995350250	01.350	27.69	- 30.60	29.15

FAN MOTOR

PHASE 3 HP 1 TYPE 3P VOLT 230/460 HZ 60/50
 FRAME 56 POLE 2 RPM 3450/2875 ENCL DP TEST HZ 60

WINDING SPECIFICATION LAM 297759 MATL CRS SLOTS 24 OD 6.000 ID 3.125
 STACK LENGTH 2.125 SLOT CELL THICKNESS 00000 SLOT FILL 37.0
 CORE WDG M/A 277058 END TURN A 1.25 B 1.25 WDG GFI 300031000

TYPE	SPAN	TURNS/COIL	Q	MAGNET WIRE	WGT	25DEG	C RES	NOM
WDG 1	9	81-81	1	0995350220	00.960	27.85	- 08.67	08.26
WDG 2	9	81-81	1	0995350220	00.960	07.24	- 08.00	07.62
WDG 3	9	81-81	1	0995350220	00.960	06.81	- 07.53	07.17

y4

Warranty

I. Hoyt Corporation warrants new Laundry Tumblers of its manufacture to be free from defective materials and workmanship for a period of six (6) months. All parts which are subject to wear or have a limited life expectancy, such as gaskets, belts, lint bags, etc., we warrant to be free from defective materials and workmanship for a period of ninety (90) days. All other parts and components such as bearing, lights, solenoids, meters, etc., we warrant to be free from defective materials and workmanship for a period of six (6) months.

II. All other equipment or Dry Cleaning machines manufactured by the Hoyt Corporation are warranted to be free from defective materials and workmanship for a period of twelve (12) months. All parts which are subject to wear or have a limited life expectancy, such as gaskets, belts, lint bags, etc., we warrant to be free from defective materials and workmanship for a period of ninety (90) days. All other parts and components, such as bearings, lights, relays, solenoids, meters, etc., we warrant to be free from defective materials and workmanship for a period of twelve (12) months.

III. This warranty does not apply to electric motors, as they are covered by the specific electric motor manufacturer's warranty and service exchange plan.

IV. This warranty does not apply to used or second-hand machines or equipment, nor extend to anyone other than the original purchaser.

V. This warranty does not apply to machines or equipment which are broken or damaged in transit, as this matter is to be taken up directly by the purchaser, with the transportation company.

VI. The period covered by this warranty shall run from the date of manufacture, as stamped on the data plate, but in no case to be longer than the following:

A. For Laundry Tumblers - a total of seven (7) months.

B. For all other equipment - a total of thirteen (13) months.

VII. We reserve the option to make repairs, in lieu of replacement, when deemed advisable to do so.

VIII. In accordance with the standard warranty for comparable machinery and equipment, and as is usual throughout the manufacturing industry, the Corporation's liability under this warranty shall be limited to furnishing a replacement part at the regular list price f.o.b. our factory, with credit being allowed only, if upon being returned to our factory, transportation prepaid, within the applicable warranty period stated above, our examination reveals such part to be defective as a result of defective materials or workmanship.

IX. In the event of a claim under this warranty, we must be given prompt written notice upon discovery of the claimed defect, describing the defect and providing the machine model number, serial number and electrical specifications. We will not accept responsibility for repairs or the cost of any work done without specific written factory authorization.

X. This warranty shall not apply to machines or equipment which have been tampered with after leaving our control, or have been subject to misuse, neglect, maladjustment, abuse or improper use, or improper or inadequate installation, care, maintenance and service; nor which have had the serial number altered, defaced or removed. Misuse or abuse of a machine or any part thereof, shall be construed to include, but shall not be limited to: operation under loads, speeds, pressures or electrical current characteristics, or with supplies other than specified by us, and damage by negligence, accident, fire, or force of the elements.

XI. We assume no responsibility for any damage or malfunction attributable to local conditions such as water or atmospheric conditions, but not limited to these specific conditions only.

XII. We assume no responsibility for any loss of supplies or damage to materials, nor any loss of time attributable to items covered by this warranty.

XIII. We assume no liability for consequential damages of any kind; the purchaser, by acceptance of this machine and equipment, shall assume all liability for the consequence of its use or misuse by the purchaser, his employees or others.

XIV. We reserve the right to make engineering changes and construction modifications on any machine or part thereof, without notice and without incurring any obligation to provide these changes or modifications on any machines or equipment previously sold.

XV. All equipment and parts prices are subject to change without notice.

The foregoing warranty is in lieu of all other warranties, express or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. In no event shall the corporation be liable for any breach of warranty beyond the terms and conditions stated herein.

HOYT CORPORATION

FORGE ROAD, WESTPORT, MA 02790

(Insert Classif. of TMDER Here and At Bottom of Page) CLASSIFICATION:

NAVSEA (USER) TECHNICAL MANUAL DEFICIENCY/EVALUATION REPORT (TMDER) (NAVSEA S0005-AA-GYD-030/TMMP & NAVSEAINST 4160.3)

INSTRUCTIONS: Insert classification at top and bottom of page. Read the following before completing this form. Continue on 8 1/2" x 11" paper if additional space is needed.

1. USE THIS REPORT TO INDICATE DEFICIENCIES, USER REMARKS, AND RECOMMENDATIONS RELATING TO PUBLICATION.
2. BLOCKS MARKED WITH "*" ARE TO BE FILLED IN BY THE CONTRACTOR BEFORE PRINTING.
3. FOR UNCLASSIFIED TMDER'S, FILL IN YOUR RETURN ADDRESS IN SPACE PROVIDED ON THE BACK, FOLD AND TAPE WHERE INDICATED, AND MAIL. (SEE OPNAVINST 5510.1E FOR MAILING CLASSIFIED TMDER'S.)
4. FOR ADDITIONAL INFORMATION, CALL AUTOVON 360-4805/5084 OR COMMERCIAL 805-982-4805/5084.

1. NAVSEA NO. *		2. VOL PART *	3. TITLE *
4. REV. DATE OR TM CH. DATE	5. SYSTEM/EQUIPMENT		6. IDENTIFICATION/NOMENCLATURE (MK/MOD/AN)

7. USER'S EVALUATION OF MANUAL (Check Appropriate blocks)

A. EXCEL- LENT	B. GOOD	C. FAIR	D. POOR	E. COM- PLETE	F. INCOM- PLETE
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8. GENERAL COMMENTS

9. RECOMMENDED CHANGES TO PUBLICATION

PAGE NO. A.	PARA- GRAPH B.	LINE NO. C.	FIG. NO. D.	TABLE E.	F. RECOMMENDED CHANGES AND REASONS

10. ORIGINATOR AND WORK CENTER (PRINT)		11. ORIGINATOR'S RANK, RATE OR GRADE, AND TITLE		12. DATE SIGNED		
13. SIGNATURE OF WORK CENTER HEAD		14. SIGNATURE OF DEPARTMENT OFFICER		15. AUTOVON/COMM. NO.		
16. SHIP HULL NO. AND/OR STATION ADDRESS (DO NOT ABBREVIATE)						
17. THIS SPACE ONLY FOR NSDSA						
A. CONTROL NO.	B. COG ISEA	C. DATE			D. PRIORITY	E. TRANSMITTED TO
		RECEIVED	FORWARDED	DUE		

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